SCS ENGINEERS

Results of the 3rd Quarter 2005 Groundwater Monitoring and Sampling Event and Request for Case Closure

1599 Hampton Way Santa Rosa, California (NCRWQCB Site #1TSO082) (Assessor's Parcel No. 125-081-021)

File Number 01203314.00

Prepared by:

SCS Engineers 3645 Westwind Boulevard Santa Rosa, California 95403

To:

Mr. Stephen Bargsten North Coast Regional Water Quality Control Board 5550 Skylane Boulevard, Suite A Santa Rosa, California 95403

October 24, 2005

LIMITATIONS/DISCLAIMER

This report has been prepared for Mr. Phil Johnson with specific application to a Quarterly Monitoring event for the property located at 1599 Hampton Way, Santa Rosa, California. Field activities and sampling were conducted in accordance with the care and skill generally exercised by reputable professionals, under similar circumstances, in this or similar localities. No other warranty, either expressed or implied, is made as to the professional advice presented herein.

Access to the property and the surrounding area was limited by buildings, roadways, underground and above-ground utilities and other miscellaneous site and site vicinity features. Therefore, the field exploration and points of subsurface observation were somewhat restricted.

Changes in site use and conditions may occur due to variations in rainfall, temperature, water usage, or other factors. Additional information which was not available to the consultant at the time of this quarterly monitoring event or changes which may occur on the site or in the surrounding area may result in modification to the site that would impact the summary presented herein. This report is not a legal opinion.

We trust this report provides the information you require at this time and we appreciate the opportunity to work with you on this project. If you require any additional information, or have any questions, please do not hesitate to contact SCS at (707) 546-9461.

Kevin L. Coker REA 7887

162

CA registration fees paid through 06/30/06

Date

Stephen Knuttel PG 7674

CA registration fees paid through 07/31/07

24. OLT., 2005

KNUTTEL

No. 7674

Date

Introduction

SCS Engineers (SCS) is pleased to present the results of the third quarter 2005 groundwater monitoring and sampling event and request for case closure for the site located at 1599 Hampton Way, Santa Rosa, California. The site is located as shown on the Site Plan, Figure 1; general site features are as shown on the Site Location Map, Figure 2.

Background

Information in the NCRWQCB's file for the site indicated that two underground storage tanks (USTs), a 2,000-gallon UST and a 550-gallon UST, both of which were reported to store gasoline, were located at the site. A letter to the NCRWQCB from Mr. Allen L. Leepin, the Vice-President/Secretary/Treasurer of Frontier Electric (Leepin, 1989), indicated that the USTs were removed in March 1986 and were empty at the time of removal. The NCRWQCB's files did not contain information regarding who removed the USTs from the site, details of overexcavation and backfilling activities, or the method of treatment and/or disposal of any excavated soil.

A "Stockpile" soil sample and an "Evacuation" groundwater sample were collected during the UST removal activities (Multi-Tech Laboratories [Multi-Tech], 1986; NCRWQCB, 1999). The "Stockpile" soil sample contained benzene, toluene, and xylenes at concentrations which were less than 10 milligrams per kilogram (mg/kg) (NCRWQCB, 1999). The "Evacuation" groundwater sample collected from the excavation pit contained TPH-g at a concentration of 2,700 micrograms per liter (ug/L), benzene at a concentration of 840 ug/L, 1,700 ug/L toluene, and 2,800 ug/L xylenes (NCRWQCB, 1999). Based on the analytical results from the UST excavation and stockpile sampling, the NCRWQCB issued a letter directing that the property owner perform a preliminary site assessment (NCRWQCB, 1989). Mr. Leepin subsequently requested that the NCRWQCB contact M.J. Enterprises, the property owner, regarding the site assessment requirements.

In early 1996, Pacific Northwest EnviroNet group, Inc. (PNEG) was retained to prepare a work plan to address investigation activities and cleanup of soils and groundwater at the site. PNEG subsequently prepared and submitted a work plan for a preliminary site investigation (PNEG, 1996a).

In accordance with the 1996 work plan (PNEG, 1996a), eight soil borings (B-1 through B-8) were drilled and sampled at the approximate locations shown on Figure 2 in August 1996 (PNEG, 1996b). Analytical results for soil and groundwater samples indicated detectable concentrations of hydrocarbons in borings B-6 and B-7. Soil and groundwater analytical results are summarized on Tables 1 and 2. Based on the results of the August 1996 investigation, the NCRWQCB requested that a monitoring well be installed south of the former UST locations in the general vicinity of borings B-5, B-6, and B-7 (NCRWQCB, 1997). PNEG subsequently submitted a work plan to the

NCRWQCB (PNEG, 1997) to address the NCRWQCB's request. In accordance with the approved 1997 work plan, one monitoring well (MW-1) was drilled, sampled, and installed at the approximate location shown on Figure 2 in March 1998 (PNEG, 1998a). The soil samples collected from MW-1 at depths of 5 and 10 feet below existing ground surface (bgs) were below the laboratory report detection limit (RDL) for all target analytes. The soil sample collected at 13.5 feet bgs contained 39 mg/kg TPH-g, 0.0072 mg/kg ethylbenzene, and 0.010 mg/kg xylenes (PNEG, 1998a). Soil analytical results are summarized in Table 3.

Two additional monitoring wells (MW-2 and MW-3) were drilled, sampled, and installed at the approximate locations shown on Figure 2 in September 1999 (PNEG, 2000a). Soil samples collected from MW-2 and MW-3 were below the laboratory RDL for all target analytes. Soil analytical results are summarized in Table 3.

Regardless of the non-detect results from MW-2 and MW-3 during the September 1999 investigation, the NCRWQCB issued a letter directing additional investigation at the site (NCRWQCB, 2001). Subsequently, two additional monitoring wells (MW-4 and MW-5) were drilled, sampled and installed at the approximate locations shown on Figure 2 in November 2002 (PNEG, 2003a). Soil samples collected from MW-4 and MW-5 were below the laboratory RDL for all target analytes. Soil analytical results are presented in Table 3.

A work plan was submitted to the NCRWQCB proposing three additional soil borings at the site in order to evaluate the deeper water-bearing zone beneath the site (SCS, 2004b). The NCRWQCB provided written approval of this work plan by regulatory letter (NCRWQCB, 2004b).

Three additional borings (B-09, B-10 and B-11) were advanced to approximately 30 -35 feet bgs using 7-inch hollow-stem augers on June 1, 2005 at the approximate locations shown on Figure 2. The groundwater samples collected from B-09, B-10, and B-11 were below the laboratory RDL for all target analytes, with the exception of toluene which was detected at 14 micrograms per liter (μ g/L) and 1.6 μ g/L, in samples B-09-W@35.0 and B-11-W@30.0, respectively. Toluene is a typical constituent of tapes which are used to seal the groundwater sampling tool. Groundwater analytical results are presented in Table 2.

Sensitive Receptor Survey

A sensitive receptor survey (SRS) was performed for the site in May 2001 (PNEG, 2001a); a supplemental SRS was performed in 2004 (SCS, 2004a). The survey was conducted on May 16, 2001, and included all properties within a 500 foot radius of the subject site. A review of Santa Rosa City Utility records was conducted, as well as interviews at all properties within the search area not connected to the municipal water utility. Six domestic wells were identified within the target area, the nearest of which are within approximately 200 feet of the subject site. Groundwater in the site vicinity is drawn for domestic, commercial, and agricultural uses. A review of available DWR Well Logs for domestic wells in the site vicinity indicates well depths ranging from approximately 50 feet

to 250 feet, and are generally sealed to at least 20 feet bgs. The approximate locations of the wells within the requested search radius are as shown on Figure 4. Results of the door-to-door survey are presented in Table 6.

In response to the NCRWQCB's request for additional information (NCRWQCB, 2004) with respect to the previously submitted SRS (PNEG, 2001a), the following information was reported (SCS, 2004). Local utility companies and the property owner were contacted by SCS regarding the possible presence of utility trenches between MW-1 and MW-3 which may act as groundwater conduits. There are sewer, water, and gas lines running along Hampton Way adjacent to the site at the approximate locations shown on Figure 2. The only subsurface feature known to the property owner in the vicinity of MW-1 and MW-3 was reported to be a sewer line running from the street toward the site building. The property owner indicated that to the best of his knowledge, it is in the vicinity of the former UST location (Figure 2). The sewer manhole cover observed at the approximate location shown on Figure 2 suggests that a sewer line is located near the former UST location, as shown on Figure 2.

Recorded depth to groundwater in the monitoring wells has ranged from approximately 3.5 feet bgs to approximately 16.5 bgs (Table 5). Typically the sewer is the deepest of the utility trenches and can be as deep as 6 to 8 feet bgs; however, the City of Santa Rosa Utility map indicates that the sewer line adjacent to the site is approximately 3.5 feet bgs. The other trenches present are not likely to be substantially deeper than this. It was therefore concluded that none of the nearby trenches would provide a significant preferential groundwater pathway in the vicinity of the site.

Site Conceptual Model Site Geology/Hydrogeology

The site is located within the southwest area of Santa Rosa and is surrounded by a mix of commercial, light industrial and residential properties. Beneficial uses of groundwater in the site vicinity are residential, industrial, and commercial.

The site lithology is best characterized as clayey material with fine gravel and sand from near surface to approximately 8 to 12 feet bgs. This layer is underlain by fine to coarse gravel with silt and sand present from approximately 20 feet bgs. Interbedded silt and sandy silt is present from approximately 20 feet to 30-35 feet bgs. Typically subsurface material has been observed to be moist to wet from approximately 10 to 15 feet bgs to 30 to 35 feet bgs, the maximum depth explored at the site.

Changes in depth to groundwater measurements indicate a seasonal fluctuation with high stands of groundwater in the late winter to early spring (January-April) months and low stands in late summer to early fall (August-November). Free groundwater is likely present during winter and spring (during times of elevated rainfall) in the gravel layer to approximately 10 ft bgs, according to site lithology and historical groundwater level measurements from the onsite monitoring wells. Historic groundwater elevation data indicates that confined or semi-confined (artesian) conditions may exist

during high stands of groundwater. The groundwater flow direction at the site has ranged from northwest to southwest at gradients from 0.03 to 0.1 (Table 5).

Groundwater Monitoring

Depth to groundwater measurements were collected on August 30, 2005 from each of the project monitoring wells (MW-1 through MW-5). Depth to groundwater measurements ranged from approximately 5.5 to 9.5 feet below existing ground surface (bgs). The depth to groundwater measurements and well casing elevations were used to calculate groundwater flow direction and gradient. Casing and groundwater elevations are reported in feet relative to mean sea level. Depth to groundwater is expressed in feet. The groundwater flow direction for this monitoring event was interpolated to be southwesterly at a calculated gradient of 0.01 (Figure 2 and Table 1).

Groundwater Sampling

Each well was checked for the presence of separate phase hydrocarbons (SPH) using an oil/water interface probe prior to purging. SPH was not present during this monitoring event. Each well was purged of approximately three wetted well casing volumes of groundwater, or at least five gallons, whichever was greater, using a submersible pump. Temperature, pH, conductivity, dissolved oxygen, and turbidity readings were measured during purging to help demonstrate that fresh groundwater was entering the well casing. Water levels in the wells were allowed to recover to approximately 80% of their static levels or for up to two hours prior to sampling. Groundwater samples were collected from the wells using a separate disposable bailer for each well. Groundwater samples were transferred to the appropriate laboratory-supplied containers for analysis. Samples were labeled, stored under refrigerated conditions, and transported under Chain-of-Custody documentation to Analytical Sciences (AS), a Department of Health Services-certified laboratory in Petaluma, California for analysis. All samples were collected following Standard Soil and Water Sampling Procedures and QA/QC Protocol. Sampling equipment was cleaned prior to use and between wells to prevent cross-contamination. Information collected during sampling activities was recorded on groundwater field sampling forms. Well Purge Records are presented in Appendix A. Purge water generated from recent well sampling is stored at the site in 55-gallon, UN/DOTapproved 17 E/H drums, pending characterization and disposal.

Laboratory Analysis

Groundwater samples collected from the monitoring wells were analyzed for total petroleum hydrocarbons as gasoline (TPH-g) by EPA Method 5030/8015M, and for VOCs by EPA Method 8260B full scan.

Groundwater Analytical Results

The analytical results for MW-1 through MW-5 for the August 30, 2005 sampling event are presented in Table 4. Historic groundwater analytical results are also presented in Table 4. Groundwater analytical data for TPH-g and benzene are plotted on time versus concentration diagrams (Diagrams A and B). The laboratory analytical report is presented in Appendix B.

Discussion

The most recent sampling event at the site occurred on August 30, 2005. Groundwater samples collected from MW-2, MW-3, and MW-5 during this event were below laboratory RDLs for all target analytes. The sample collected from MW-1 contained TPH-g at a concentration of 280 ug/L, ethylbenzene at a concentration of 1.0 ug/L, n-propylbenzene (a gasoline constituent) at a concentration of 1.9 ug/L, and was below the laboratory RDL for all other target analytes. The sample collected from MW-4 contained TPH-g at a concentration of 61 ug/L, tert-butylbenzene (a gasoline constituent) at a concentration of 3.1 ug/L, and was below the laboratory RDL for all other target analytes.

A review of historic groundwater data indicates that TPH-g has not exceeded the laboratory RDL in groundwater samples from MW-2, MW-3, and MW-5. Benzene has been detected above 1.0 ug/L (regulatory maximum contaminant limit) in MW-2 through MW-5 on four occasions. All of benzene detections above the MCL occurred in samples collected from MW-2. Benzene has not been present above the laboratory RDL in MW-2, MW-3, and MW-5 since November 2002.

A review of historic TPH-g concentration data, presented in Diagram A indicates a general decline in TPH-g concentrations in MW-1 over time since 1998. Diagram B presents historic benzene concentration data that indicates a general decline in benzene concentration in MW-1 with the maximum concentration of benzene of 5.2 ug/L occurring in October 2000. Analytical data for TPH-g and VOCs in MW-2 through MW-5 groundwater samples are generally slightly above or below the laboratory RDL.

Review of data collected during previous investigations indicates that soil impact is minimal and confined proximal to the former tank hold (Figures 5 and 6). A review of historic groundwater investigation data from both borings and monitoring wells indicates that impacted groundwater is generally confined proximal to the tank hold (Figures 7 and 8). An investigation conducted in June 2005 collected depth discrete groundwater samples (B-9, B-10, B-11) from the deeper water bearing zone at approximately 30 to 35 feet bgs. Results of this investigation indicate that impact to soil and groundwater is generally limited to the upper water-bearing zone.

Conclusions

The results of investigations conducted to date indicate that the impact to soil and groundwater is in the upper water-bearing zone, generally confined proximal to the former tank hold. A review of data collected and trendline analyses of TPH-g and benzene in groundwater indicates declining concentrations over time with seasonal fluctuations corresponding to seasonal changes in groundwater elevations. A review of groundwater analytical data, flow direction and gradient indicate that the exiting groundwater plume is shallow, confined to a limited area, static, and declining in concentration.

The sensitive receptor surveys revealed potential preferential pathways (buried utility corridors) at and in the site vicinity. Potential for contaminant transport through identified preferential pathways appears low based on subsurface lithology, groundwater elevation and flow, and the generally low to non-detect concentrations present in groundwater and soil samples from MW-2 through MW-5 and borings distal to the former tank hold.

Identified sensitive receptors (domestic water supply wells), have reportedly been supplied with alternative drinking water sources. No municipal water supply wells are located within 1 mile of the subject site. There is also little likelihood that the shallow groundwater will be put into beneficial uses in the foreseeable future. A limited soil and groundwater impact appears to be confined to the general vicinity of the former tank hold. The potential threat to human health by the minimal residual groundwater impact in the immediate vicinity of MW-1 is considered to be very low based upon the information gathered to date as part of the on-going investigations at the site.

Recommendations

Given the information and conclusions discussed above, SCS again recommends the site be considered for case closure. Upon receipt of NCRWQCB concurrence with this recommendation, the project monitoring wells (MW-1, MW-2, MW-3, MW-4 and MW-5) will be decommissioned in accordance with the "California Well Standards", Bulletins 74-81 and 74-90 by a licensed C-57 well driller and former well surface expressions restored to original conditions to the extent feasible.

Soil and Water Disposal

On September 1, 2005, 4 drums of non-hazardous soil, and 2 drums of non-hazardous water which were generated from site investigative activities were transported to Republic Services Vasco Road Landfill in Livermore, and Seaport Refining & Environmental disposal facility in Redwood City, respectively. Copies of the Certificates of Disposal are presented in Appendix B.

Attachments File No. 01203314.00

Figures

Figure 1: Site Location Map

Figure 2: Site Plan

Figure 3: Site Plan - Groundwater Flow Direction and Gradient for 08/30/05

Figure 4: Sensitive Receptor Map

Figure 5: Isoconcentration Map – Residual Benzene in Soil Isoconcentration Map – Residual TPH-g in Soil

Figure 7: Isoconcentration Map – Residual Benzene in Groundwater Figure 8: Isoconcentration Map – Residual TPH-g in Groundwater

Diagrams and Tables

Key to Diagram and Tables

Diagram A: TPH-g & Groundwater Elevation vs. Time
Diagram B: Benzene & Groundwater Elevation vs. Time

Table 1: Soil Sample Analytical Results – Borings B-1 through B-8

Table 2: Groundwater Sample Analytical Results – Borings B-1 through B-11 Table 3: Soil Sample Results – Monitoring Wells – MW-1 through MW-5

Table 4: Groundwater Sample Analytical Results – Monitoring Wells - MW-1 through

MW-5

Table 5: Groundwater Flow Direction and Gradient

Table 6: Sensitive Receptor Survey Results

Appendices

Appendix A: Well Purge Records, dated August 30, 2005

Appendix B: Analytical Sciences Report #5083102, dated September 9, 2005

Certificates of Disposal, dated September 1, 2005

Reference List File No. 01203314.00

Leepin, A., 1989. Letter to NCRWQCB re: UST Removal, October 31.

Multi-Tech, 1986. Analytical report, March 4.

NCRWQCB, 1989. Work Plan Directive, November 13.

NCRWQCB, 1997. Work Plan Directive, June 6.

NCRWQCB, 1999. Regulatory letter to USTCF, February 11.

NCRWQCB, 2001. Work Plan Directive, November 21.

NCRWQCB, 2004a. Request Additional Information for SRS, January 8.

NCRWQCB, 2004b. Work Plan Approval, August 17.

PNEG, 1996a. Work Plan for a Preliminary Site Investigation at the 1599 Hampton Way Site, Santa

1599 Hampton Way, Santa Rosa, CA - File 01203314.00 Results of 3rd Quarter 2005 Groundwater Monitoring and Sampling Event and Request for Case Closure

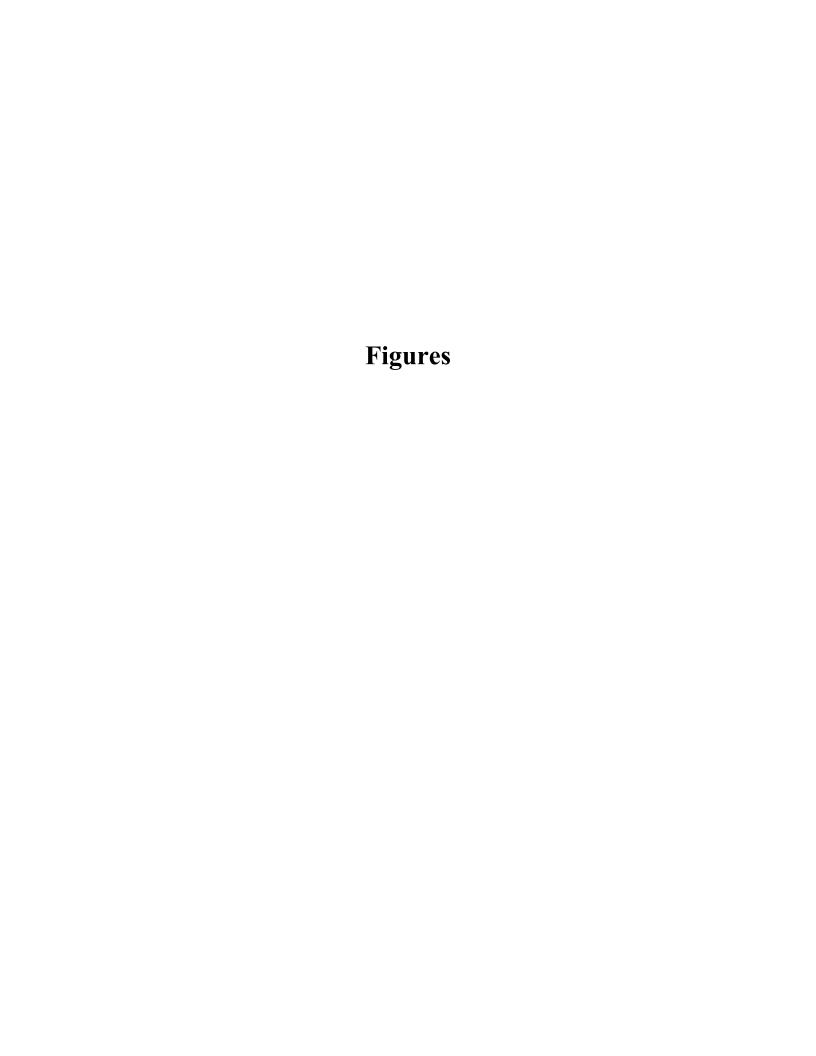
- Rosa, California, February 5.
- PNEG, 1996b. Preliminary Site Investigation Report for the 1599 Hampton Way Site, Santa Rosa, California, November 22.
- PNEG, 1997. Work Plan for Additional Site Investigation at the 1599 Hampton Way Site, Santa Rosa, California, December 12.
- PNEG, 1998a. Report on Additional Site Investigation at the 1599 Hampton Way Site, Santa Rosa, California, May 19.
- PNEG, 1998b. Work Plan for Additional Site Investigation at the 1599 Hampton Way Site, Santa Rosa, California, August 5.
- PNEG, 1998c. Report on Quarterly Monitoring at the 1599 Hampton Way Site, Santa Rosa, California, September 1.
- PNEG, 1999. Work Plan Revision for Additional Site Investigation at the 1599 Hampton Way Site, Santa Rosa, California, March 30.
- PNEG, 2000a. Report on Additional Site Investigation at 1599 Hampton Way, Santa Rosa, California, February 3.
- PNEG, 2000b. Report on January 2000 Quarterly Groundwater Monitoring Event at 1599 Hampton Way, Santa Rosa, California, March 14.
- PNEG, 2000c. Report on 2nd Quarter 2000 Groundwater Monitoring Event at 1599 Hampton Way, Santa Rosa, California, June 26.
- PNEG, 2000d. Report on 3rd Quarter 2000 Groundwater Monitoring Event at 1599 Hampton Way, Santa Rosa, California, September 5.
- PNEG, 2000e. Report on 4th Quarter 2000 Groundwater Monitoring Event at 1599 Hampton Way, Santa Rosa, California, December 4.
- PNEG, 2001a. Report on 1st Quarter 2001 Groundwater Monitoring Event at 1599 Hampton Way, Santa Rosa, California, June 6.
- PNEG, 2001b. Work Plan for an Additional Site Investigation at the 1599 Hampton Way, Santa Rosa, California, June 14.
- PNEG, 2002a. Work Plan Addendum for an Additional Site Investigation 1599 Hampton Way, Santa Rosa, California, January 15.
- PNEG, 2002b. Results of the 4th Quarter 2001 Groundwater Monitoring and Sampling Event at 1599 Hampton Way, Santa Rosa, California, February 14.
- PNEG, 2002c. Results of the 1st Quarter 2002 Groundwater Monitoring and Sampling Event at 1599 Hampton Way, Santa Rosa, California, April 26.
- PNEG, 2002d. Results of the 2nd Quarter 2002 Groundwater Monitoring and Sampling Event at 1599 Hampton Way, Santa Rosa, California, June 28.
- PNEG, 2002e. Results of the 3rd Quarter 2002 Groundwater Monitoring and Sampling Event at 1599 Hampton Way, Santa Rosa, California, September 25.
- PNEG, 2003a. Report on the Results of Additional Site Investigation 1599 Hampton Way, Santa Rosa, California, January 7.
- PNEG, 2003b. Results of the 1st Quarter 2003 Groundwater Monitoring and Sampling Event 1599 Hampton Way, Santa Rosa, California, March 14.
- PNEG, 2003c. Results of the 2nd Quarter 2003 Groundwater Monitoring and Sampling Event 1599 Hampton Way, Santa Rosa, California, June 22.
- SCS, 2003. Results of the 3rd Quarter 2003 Groundwater Monitoring and Sampling Event 1599

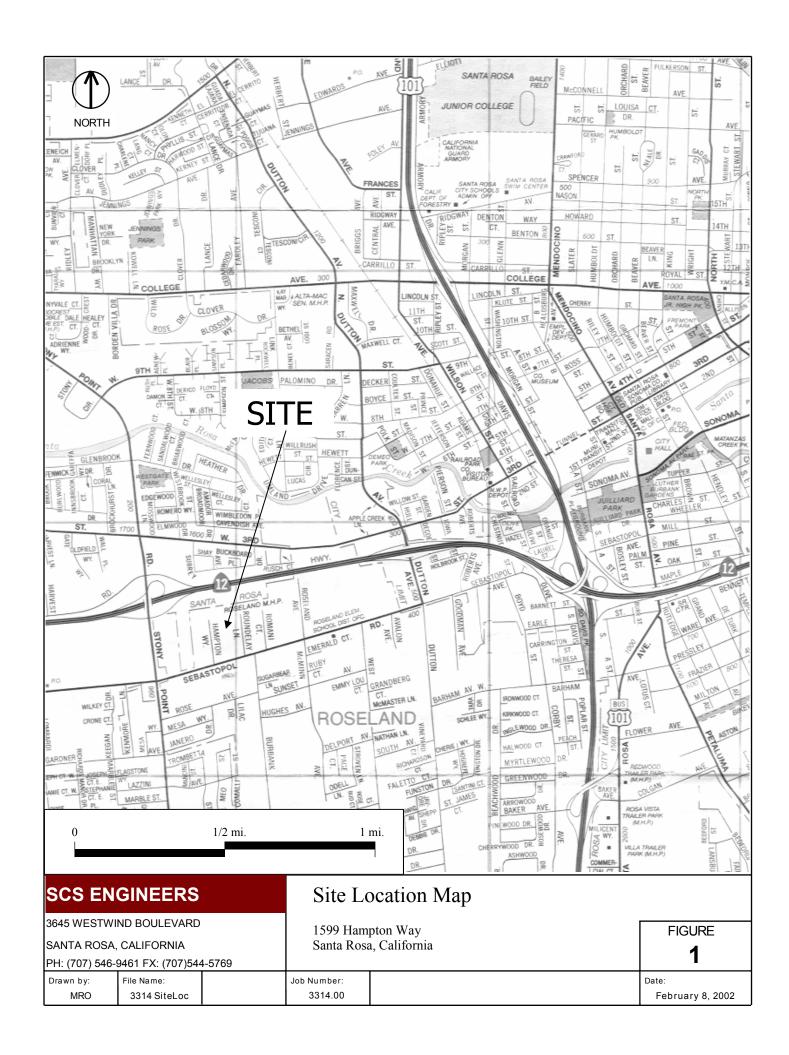
Hampton Way, Santa Rosa, California, October 21.

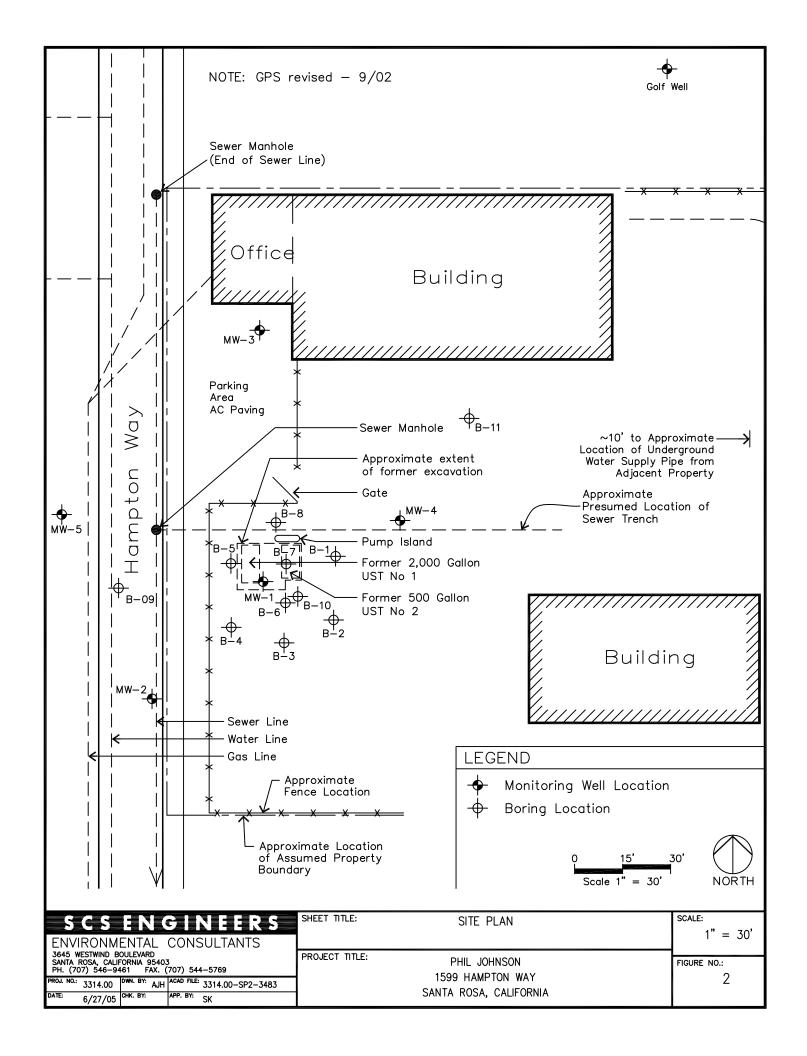
- SCS, 2004a. Results of the 1st Quarter 2004 Groundwater Monitoring and Sampling Event 1599 Hampton Way, Santa Rosa, California, February 18.
- SCS, 2004b. Work Plan for an Additional Site Investigation 1599 Hampton Way, Santa Rosa, California, June 21.
- SCS, 2005. Results of Additional Subsurface Investigation and Request for Case Closure 1599 Hampton Way, Santa Rosa, California, June 27.

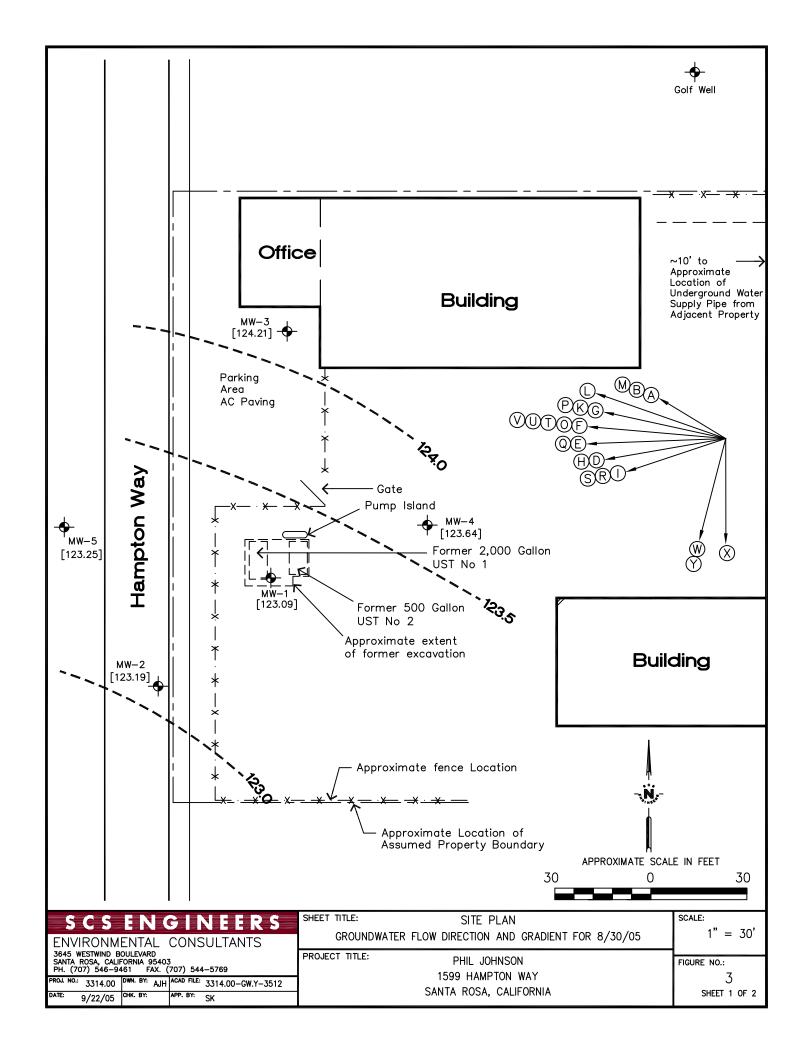
Distribution List File No. 01203314.00

Judith Johnson Trust c/o Mr. Phil Johnson 4591 Heath Circle Rohnert Park, California 94928

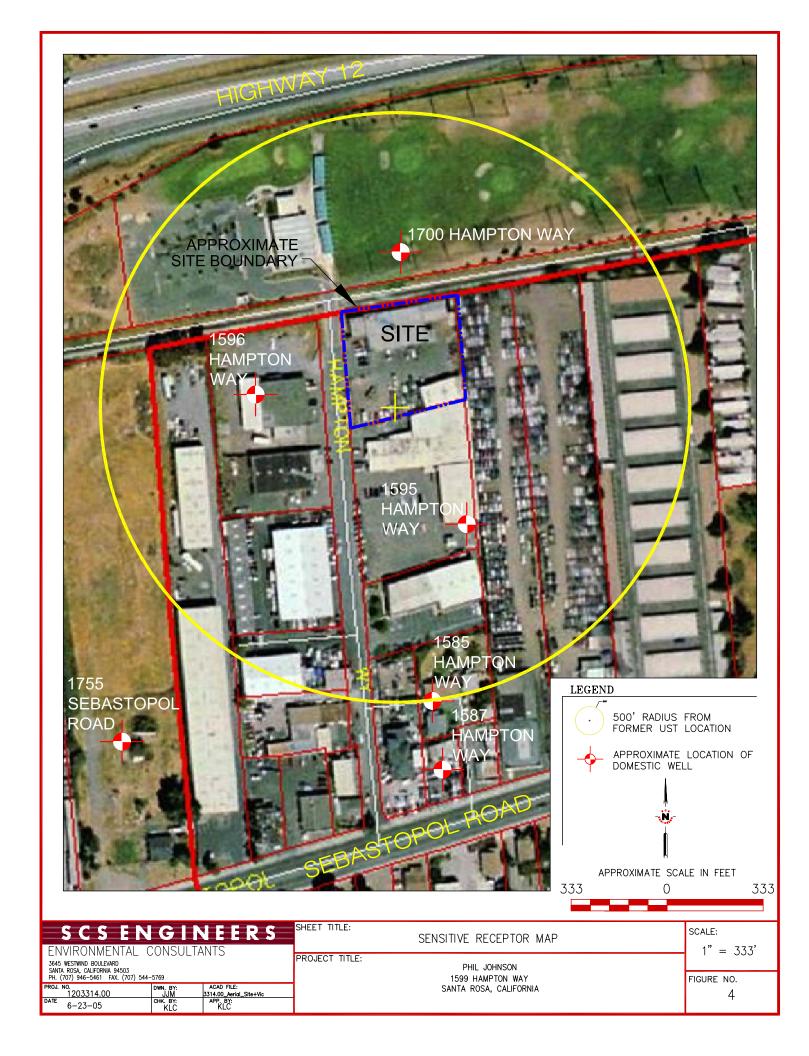


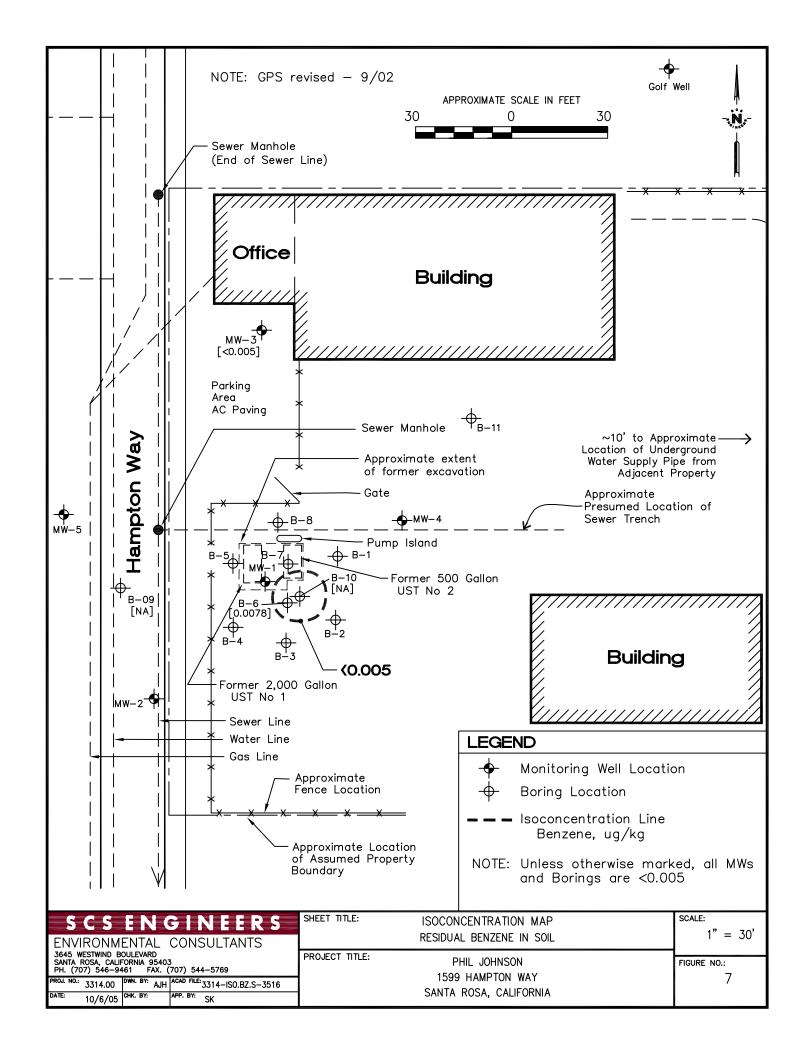


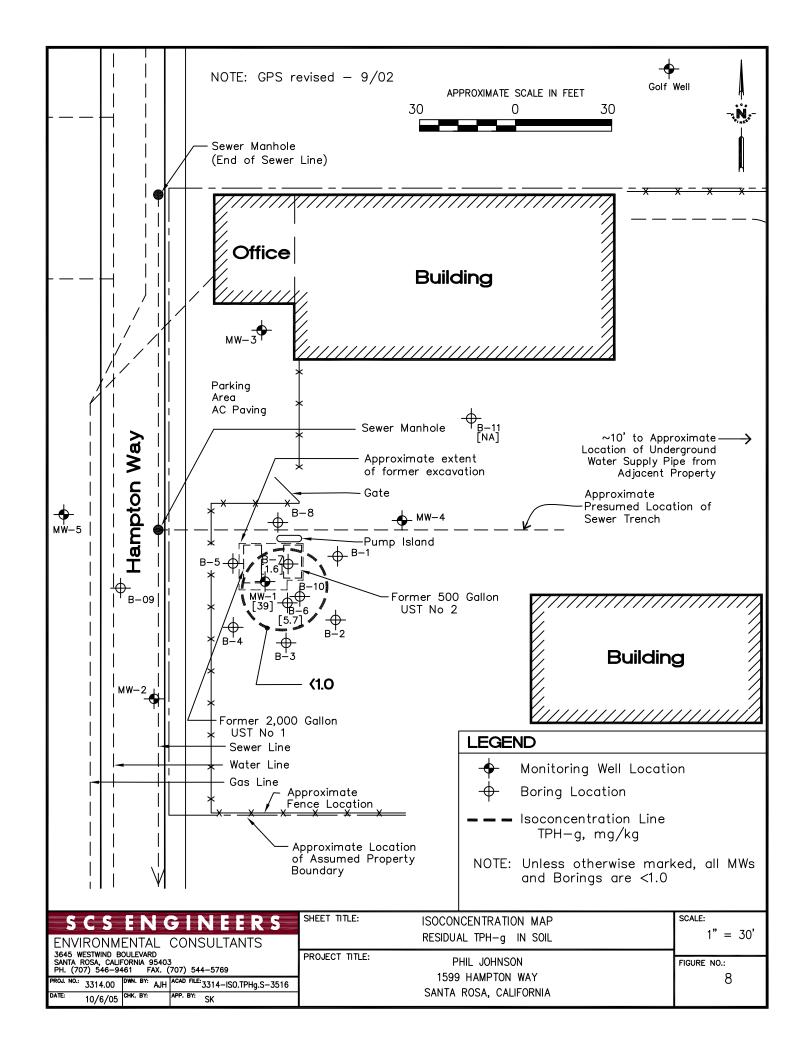


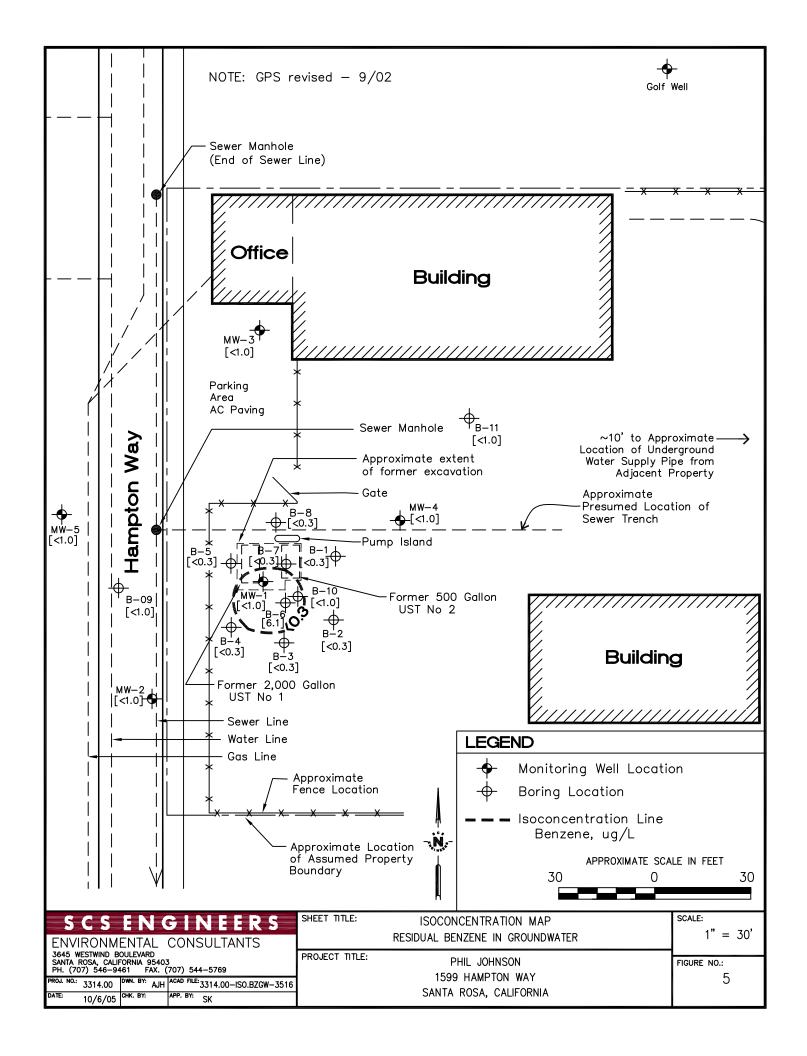


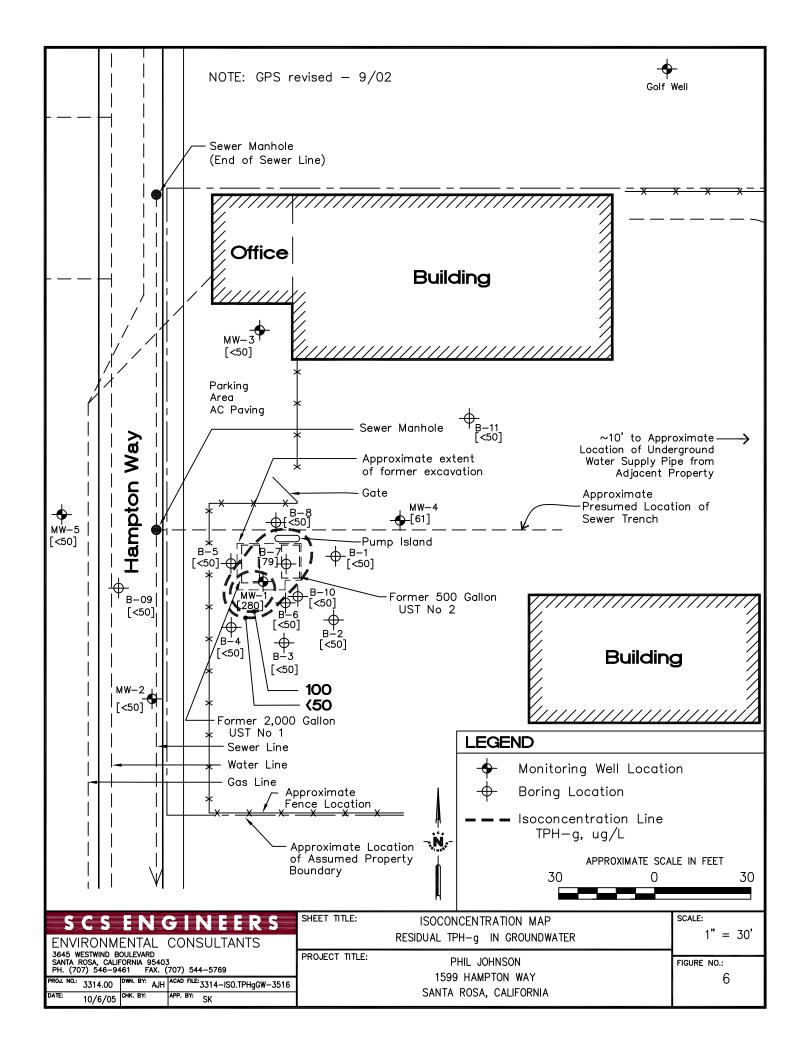
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dentifier Tag	Date	Est. Flow Direction	Gradient Slope					1
A	10/8/98	N70°W	i = 0.1					1
B	1/12/00	N70°W	i = 0.057					ГЛ Approx. Locations
0	4/13/00		Not Calculated					LJ of former UST's
(D)	6/23/00	S85*W	i = 0.033					1
E	7/13/00	Due West	i = 0.04					NOTE: Ground water elevations are
F	10/19/00	N85 ° W	i = 0.03					feet above mean sea level (Nation Geodetic Vertical Datum, 1929).
<u> </u>	3/30/01	N80°W	i = 0.04					
$\overline{\mathbb{H}}$	9/11/01	S85*W	i = 0.07					1
1	10/16/01	S80°W	i = 0.06					1
J	11/13/01							1
K	12/12/01	N80 ° W	i = 0.05					
L	1/15/02	N75 * W	i = 0.04					
M	2/12/02	N70 ° W	i = 0.06					
N	3/12/02		Not Calculated					7
0	4/16/02	N85 ° W	i = 0.05					1
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Q	6/11/02	Westerly	i = 0.04]
R	7/16/02	S80*W	i = 0.02					1
S	8/13/02	S80*W	i = 0.02					1
T	11/13/02	Westerly	i = 0.04					1
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$\overline{\mathbb{V}}$	5/6/03	Westerly	i = 0.01					1
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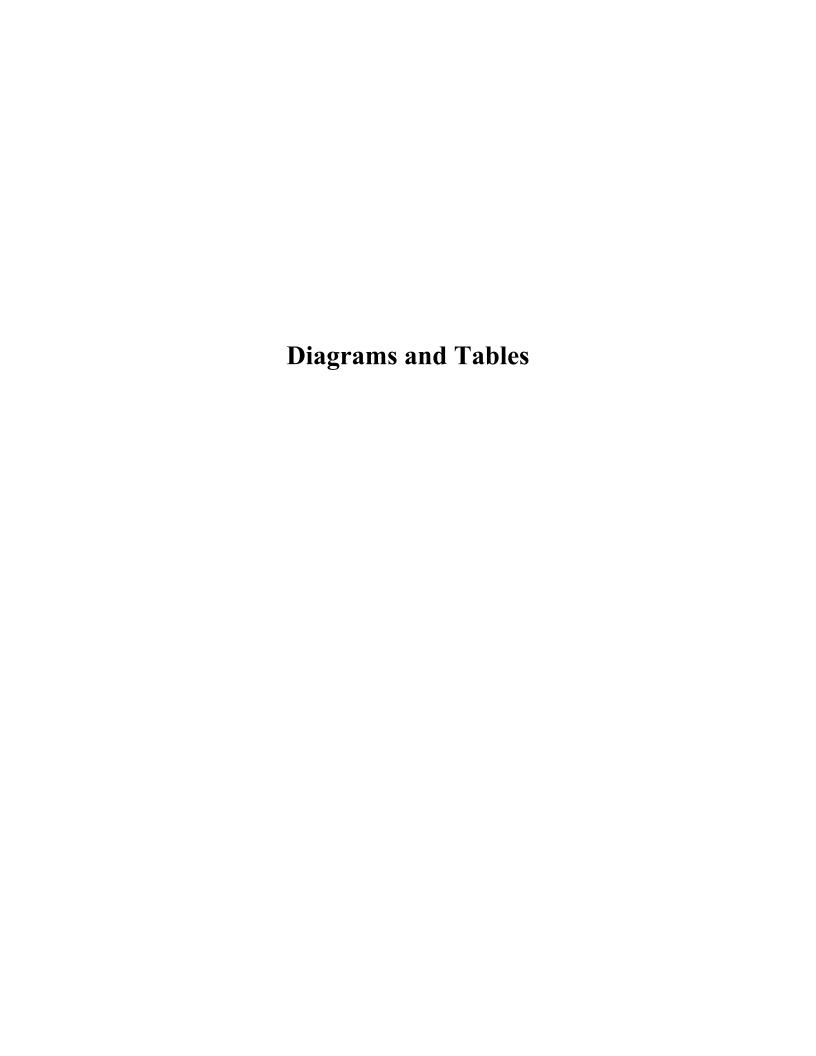












Key to Diagram and Tables 1599 Hampton Way, Santa Rosa

TPH-g = Total petroleum hydrocarbons in the gasoline range

B = Benzene

T = Toluene

E = Ethylbenzene

X = Xylenes

MTBE = Methyl tertiary butyl ether

Five Oxys = Five ether-based oxygenates [diisopropyl ether (DIPE), ethyl tertiary butyl

ether (ETBE), tert-amyl methyl ether (TAME), MTBE, and tert-butyl

alcohol (TBA)]

EDC = Ethylene dichloride 2

EDB = Ethylene dibromide 3

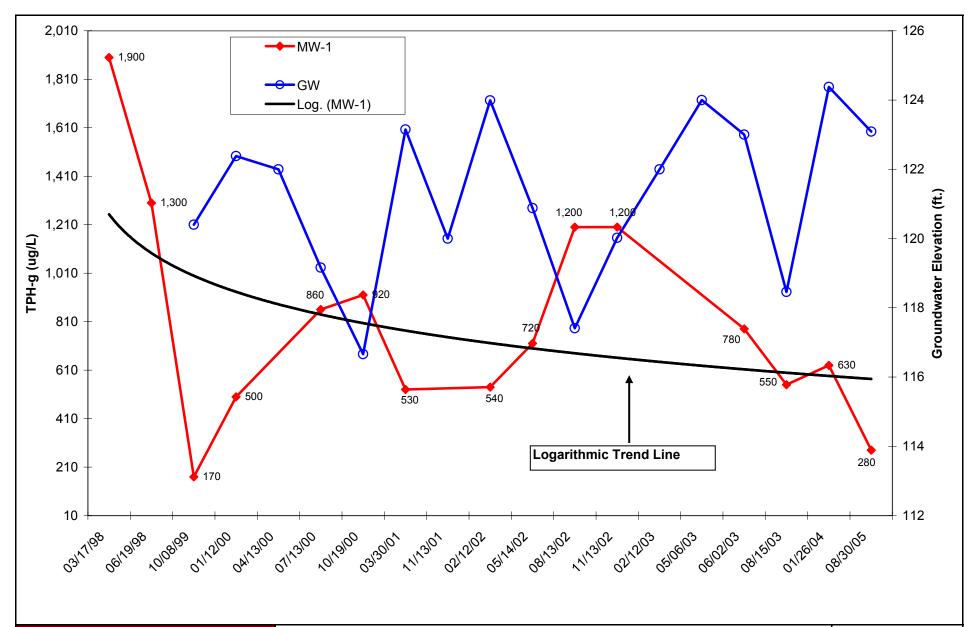
Pb Scavs = Lead scavengers (EDC, EDB)

mg/kg = Milligrams per kilogram

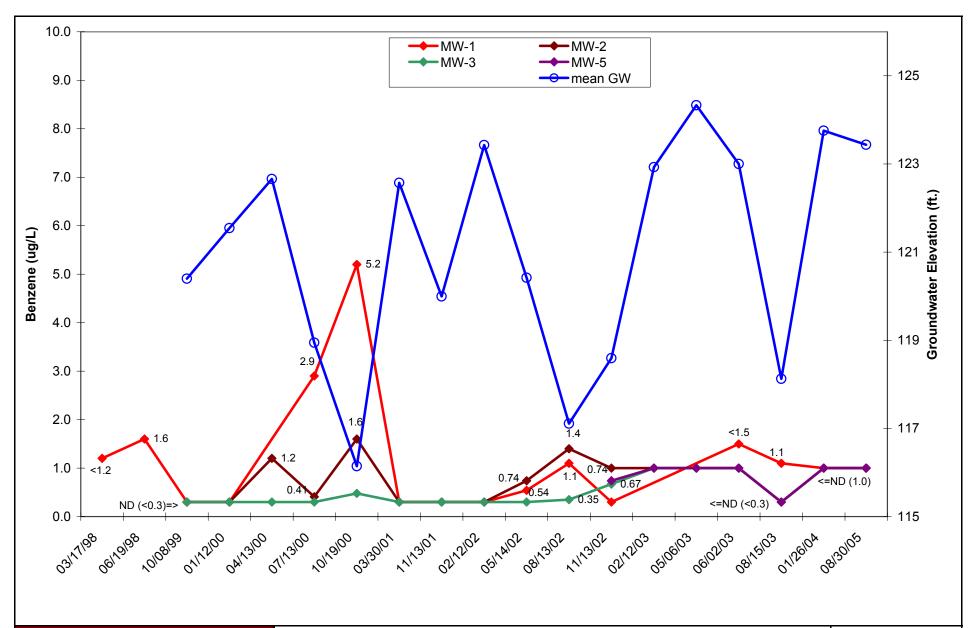
 μ g/L = Micrograms per liter

 2 EDC has been referred to as 1,2-dichloroethane (1,2-DCA) in previous reports.

³ EDB has been referred to as 1,2-dibromoethane (1,2-DBA) in previous reports.



SCS ENGINEERS	TPH-g & GROUNDWATER ELEVATION vs TIME	DIAGRAM
3645 WESTWIND BOULEVARD		_
SANTA ROSA, CALIFORNIA	1599 Hampton Way	A
PH: (707) 546-9461 FX: (707)544-576	Santa Rosa, California	
Drawn By: KLC File Name: TP	PH-g-GW Job Number: 01203314.00	DATE: 09/13/05



SCS ENGIN	EERS	BENZENE & GROUNDWATER ELEVATION vs TIME	DIAGRAM
3645 WESTWIND BO	ULEVARD		_
SANTA ROSA, CALIF	ORNIA	1599 Hampton Way	B
PH: (707) 546-9461 F.	X: (707)544-5769	Santa Rosa, California	
Drawn By: KLC	File Name: TPH-g-GW	Job Number: 01203314.00	DATE: 09/13/05

Table 1: Soil Sample Analytical Results - Borings B-1 through B-8 1599 Hampton Way, Santa Rosa, California

Sample	Date	TPH-g	В	T	E	X
Number	Sampled			mg/kg		
B-1-5'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-1-10'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-1-15'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-1-20'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-2-5'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-2-10'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-2-15'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-2-20'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-3-5'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-3-10'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-3-15'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-3-20'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-4-5'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-4-10'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-4-15'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-4-20'	08/22/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-5-5'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-5-10'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-5-15'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-5-19'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-6-5'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-6-10'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-6-14.5'	08/23/96	5.7	0.0078	0.0068	0.029	0.043
B-6-19.5'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-7-6'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-7-9'	08/23/96	1.6*	< 0.005	< 0.005	< 0.005	0.0074
B-7-14'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-7-20.5'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-8-5'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-8-10'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-8-14.5'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005
B-8-20'	08/23/96	<1.0	< 0.005	< 0.005	< 0.005	< 0.005

^{* =} Atypical Pattern.

Table 2: Groundwater Sample Analytical Results - Borings B-1 through B-11 1599 Hampton Way, Santa Rosa, California

Sample	Date	TPH-g	В	T	E	X				
Number	Sampled	-	ug/L							
B-1-Water	08/22/96	< 50	< 0.3	< 0.3	< 0.3	< 0.3				
B-2-Water	08/22/96	< 50	< 0.3	< 0.3	< 0.3	< 0.3				
B-3-Water	08/22/96	< 50	< 0.3	< 0.3	< 0.3	< 0.3				
B-4-Water	08/22/96	< 50	< 0.3	< 0.3	< 0.3	< 0.3				
B-5-Water	08/23/96	< 50	< 0.3	0.42	< 0.3	< 0.3				
B-6-Water	08/23/96	< 50	6.1	< 0.3	1.0	1.4				
B-7-Water	08/23/96	79	< 0.3	< 0.3	4.1	2.3				
B-8-Water	08/23/96	< 50	< 0.3	< 0.3	< 0.3	< 0.3				
B-09-W@35.0'	06/01/05	< 50	<1.0	14	<1.0	<1.0				
B-10-W@30.0'	06/01/05	< 50	<1.0	<1.0	<1.0	<1.0				
B-11-W@30.0'	06/01/05	< 50	<1.0	1.6	<1.0	<1.0				

Table 3: Soil Sample Analytical Results - Monitoring Wells - MW-1 through MW-5 1599 Hampton Way, Santa Rosa, California

Sample	Date Sampled	TPH-g	В	T	E	X	MTBE	8260*
Number	Date Sampled		<u>-</u> -		mg/kg			
MW-1-5'	03/11/98	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	<1.0	< 0.005
MW-1-10'	03/11/98	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	<1.0	< 0.005
MW-1-13.5'	03/11/98	39	< 0.005	< 0.005	0.0072	0.010	<1.0	< 0.005
MW-2-5'	09/30/99	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MW-2-10'	09/30/99	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MW-2-13'	09/30/99	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MW-3-5'	09/30/00	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MW-3-10'	09/30/99	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MW-3-13'	09/30/99	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
MW-4-5'	11/08/02	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005 to <0.01
MW-4-10'	11/08/02	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005 to <0.01
MW-4-12'	11/08/02	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005 to <0.01
MW-4-15'	11/08/02	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005 to <0.01
MW-5-5'	11/08/02	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005 to <0.01
MW-5-10'	11/08/02	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005 to <0.01
MW-5-12'	11/08/02	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005 to <0.01
MW-5-15'	11/08/02	<1.0	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	<0.005 to <0.01

^{*} Additional VOC's by EPA method 8260 were None detect.

Table 4: Groundwater Sample Analytical Results - Monitoring Wells - MW-1 through MW-5 1599 Hampton Way, Santa Rosa, California

ID	Date	ТРН-д	В	Т	E	X	MTBE	DIPE	ETBE	TAME	TBA	s-butylbenzene	t-butylbenzene	n-butylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	sec-butylbenzene	tert-butylbenzene	isopropylbenzene	naphthalene	p-isopropyltoluene	4-isopropyltoluene	bromodichlormethane	acetone	methylethylketone
										_				ug/L												
	03/17/98	1,900	<1.2	<3.9	2.2	1.3	<9.0	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	< 0.50
	06/19/98	1,300	1.6	ND	18	6.4	0.61	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	10/08/99	170	< 0.30	< 0.50	1.3	1.4	< 0.50	< 0.50	< 0.50	< 0.50	<10	0.52	1.8	< 0.50	0.86	4.8	0.94	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<0.50	< 0.50	<1.0	<5.0
	01/12/00	500	< 0.30	< 0.30	0.78	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/13/00	300	<u>\0.30</u>	<u>\0.30</u>	0.76	<0.50	<u>\0.30</u>	<u> </u>	<0.50	<u>\0.30</u>	<u> </u>	IVA		accessib		INA	IVA	IVA	IVA	INA	INA	INA	INA	INA	INA	INA
	07/13/00	860	2.9	1.1	23	12.5	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	16	58	11	< 0.50	4.5	6.8	4.0	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	10/19/00	920	5.2	0.7	22	9.1	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	3.7	15	42	8.1	2.2	4.6	5.4	4.5	< 0.50	0.79	< 0.50	<5.0	<1.0
	03/30/01	530	< 0.30	< 0.50	1.3	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	3.2	4.7	4.3	2.7	2.4	3.9	2.4		1.2	< 0.50	1.0	<5.0	<1.0
		550	<0.30	<0.30	1.3	<0.30	< 0.50	<0.30	<0.30	<0.30	<10	< 0.50		accessib		4.3	2.7	2.4	3.9	2.4	1.6	1,2	<0.30	1.0	√3.0	<1.0
MW-1	11/13/01 02/12/02	540	< 0.30	< 0.30	0.07	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50			0.00	1.0	2.2	5.0	2.2	<5.0	< 0.50	< 0.50	< 0.50	21	<1.0
1V1 VV - 1	05/14/02	540 720	0.54		0.87	0.87	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	2.1 1.2	5.1	0.89	1.0 <0.50	3.2	5.8 4.9	2.2	1.8	< 0.50	< 0.50	< 0.50	9.1	<1.0
				0.38											1.8	0.67				1.6					<5.0	
	08/13/02	1,200 1,200	1.1	0.47	12	5.1	< 0.50	< 0.50	< 0.50	< 0.50	<10 <10	< 0.50	< 0.50	< 0.50	4.0	1.3	0.88	1.0	6.5	2.7	2.1	0.71	< 0.50	< 0.50		<1.0
	11/13/02 02/12/03	1,200	< 0.3	0.33	1.1	1.5	< 0.50	< 0.50	< 0.50	< 0.50	<10	<0.50	<0.50	2.8 inacces	3.7	0.96	< 0.50	5.1	7.0	1.8	1.3	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	05/06/03													inacces												
		700	<1.5	<1.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<50	<2.5	<2.5	<2.5		<2.5	<2.5	<2.5	<2.5	-2.5	<2.5	<2.5	<2.5	<2.5	<25	<5.0
	06/02/03 08/15/03	780 550	1.1	3.3	4.3	8.5	<0.50	<0.50	<0.50	<0.50	<10	<0.50	< 0.50	<0.50	<2.5 2.2	2.1	0.67	<0.50	5.9	<2.5 0.99	1.9	<0.50	<0.50	< 0.50	<5.0	<1.0
	01/26/04	630	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0		<1.0	<1.0	2.6	5.7	1.7	<1.0	<1.0	<1.0	<1.0	NA	NA
	08/30/05	280	<1.0	<1.0	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	4.1 1.9	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA NA	NA NA
						<0.50		<0.50	<0.50	<0.50		<0.50			< 0.50					<0.50			<0.50			
	10/08/99 01/12/00	<50 <50	<0.30	<0.50	<0.50	< 0.50	<0.50 <0.50	< 0.50	< 0.50	< 0.50	<10 <10	NA	<0.50 NA	<0.50 NA	NA	<0.50 NA	<0.50 NA	<0.50 NA	<0.50 NA	NA	<0.50 NA	<0.50 NA	NA	<0.50 NA	<1.0 NA	<1.0 NA
													NA			NA					NA NA		NA NA	NA NA		
	04/13/00 07/13/00	<50 <50	1.2 0.41	1.1	0.52	1.3	<0.50 <0.50	<0.50 <0.50	<0.50	<0.50	<10	NA <0.50	<0.50	NA <0.50	NA <0.50	1.3	NA <0.50	NA <0.50	NA <0.50	NA <0.50	<0.50	NA <0.50	<0.50	<0.50	NA <5.0	NA <1.0
	10/19/00	<50	1.6	<0.50 0.33	1.2 0.64	6.3 0.61	< 0.50	< 0.50	< 0.50	< 0.50	<10	<0.50 <0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0	<1.0
	03/30/01	<50	< 0.30	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0	<1.0
																										<1.0
	11/13/01	<50 <50	<0.3	<0.3	<0.5	<0.5	<0.50	< 0.50	<0.50	<0.50	<10 <10	< 0.50	<0.50	<0.50	< 0.50	<0.50	<0.50 <0.50	< 0.50	<0.50 <0.50	<0.50	<0.50 <0.50	< 0.50	< 0.50	<0.50	<5.0 <5.0	<1.0
MW-2	02/12/02							<0.50 <0.50	< 0.50	< 0.50		< 0.50			< 0.50			< 0.50		< 0.50		< 0.50	< 0.50			
	05/14/02	<50	0.74	1.6	0.61	1.7	< 0.50				<10	< 0.50	< 0.50	< 0.50	< 0.50	0.68	<0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50	< 0.50	60	<1.0
	08/13/02	<50	1.4	1.6	1.3	4.3	2.2	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	1.0	0.63	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0	<1.0
	11/13/02	<50	1.0	0.71	1.1	2.8	1.0	<0.50	<0.50	<0.50	<10	<0.50	<0.50	<0.50	<0.50	0.87	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<5.0	
	2/12/031	<50	<1.0	<1.0	1.4	2.1	<1.0	<1.0	<1.0	<1.0	<25	NA	NA <1.0	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/06/03	<50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 <0.50	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA <5.0	NA <1.0
	08/15/03	<50	<0.3	0.81	<0.5	1.2	9.1	<0.50		<0.50	<10	< 0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50	<0.50		<1.0
i	01/26/04 08/30/05	<50 <50	<1.0 <1.0	<1.0	<1.0	<1.0 <1.0	<1.0 <1.0	<1.0	<1.0	<1.0	<25 <25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0 <1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA NA	NA NA
		<50 comometha			<1.0		<u>~1.0</u>	<u></u> 1.0	<u>~1.0</u>	\1.0	~ ∠3	<1.0	<u>~1.0</u>	<u>~1.0</u>	<u>~1.0</u>	<u>~1.0</u>	~1.0	<1.0	~1.0	<u>~1.0</u>	<1.0	<u>~1.0</u>	<1.0	<1.0	INA	INA

1 Also ND for 1,2-dibromomethane and 1,2-dichloroethane

Table 4: Groundwater Sample Analytical Results - Monitoring Wells - MW-1 through MW-5 1599 Hampton Way, Santa Rosa, California

ID	Date	ТРН-д	В	Т	E	X	MTBE	DIPE	ETBE	TAME	TBA	s-butylbenzene	t-butylbenzene	n-butylbenzene	n-propylbenzene	1,2,4-trimethylbenzene	1,3,5-trimethylbenzene	sec-butylbenzene	tert-butylbenzene	isopropylbenzene	naphthalene	p-isopropyltoluene	4-isopropyltoluene	bromodichlormethane	acetone	methylethylketone
										-				-ug/L												
	10/08/99	< 50	< 0.30	< 0.50	< 0.50	0.74	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
	01/12/00	< 50	< 0.30	< 0.30	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	04/13/00	< 50	< 0.30	0.34	< 0.50	< 0.50	2.5	< 0.50	< 0.50	< 0.50	<10	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	07/13/00	< 50	< 0.30	< 0.30	< 0.50	0.7	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	10/19/00	< 50	0.48	0.32	0.96	1.1	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	0.52	< 0.50	< 0.50	< 0.50	< 0.50	0.59	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	03/30/01	< 50	< 0.30	< 0.50	< 0.50	< 0.50	9.7	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	11/13/01	< 50	< 0.3	< 0.3	< 0.5	< 0.5	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
MW-3	02/12/02	< 50	< 0.3	< 0.3	< 0.5	< 0.5	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
IVI VV -3	05/14/02	< 50	< 0.3	0.43	< 0.5	< 0.5	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	08/13/02	< 50	0.35	0.57	0.57	1.9	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	0.86	0.59	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	5.1
	11/13/02	< 50	0.67	0.52	0.96	2.5	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	0.84	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	2/12/031	< 50	<1.0	<1.0	1.7	2.4	<1.0	<1.0	<1.0	<1.0	<25	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	05/06/03	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
	08/15/03	< 50	< 0.3	< 0.3	< 0.5	< 0.5	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	01/26/04	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
	08/30/05	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
	11/13/02	< 50	< 0.3	< 0.3	< 0.5	< 0.5	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.62	0.52	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	02/12/03	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
MW-4	05/06/03	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
101 00	08/15/03	< 50	< 0.3	1.3	0.82	3.3	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	0.60	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	01/26/04	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
	08/30/05	61	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	3.1	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
	11/13/02	< 50	0.74	0.55	0.9	2.4	< 0.50	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	0.83	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	02/12/03	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
MW-5	05/06/03	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
101 00 -3	08/15/03	< 50	< 0.3	1.3	0.82	3.3	0.62	< 0.50	< 0.50	< 0.50	<10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 5.0	<1.0
	01/26/04	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA
	08/30/05	< 50	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<25	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	NA	NA

1 Also ND for 1,2-dibromomethane and 1,2-dichloroethane

Table 5: Groundwater Flow Direction and Gradient 1599 Hampton Way, Santa Rosa, California

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Water (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction and Gradient (i)
MW-1		130.16	9.76	120.40	N70°W
MW-2	10/08/98	129.96	11.88	118.08	i = 0.1
MW-3		131.42	12.45	118.97	1-0.1
MW-1		130.16	7.78	122.38	N70°W
MW-2	01/12/00	129.96	8.82	121.14	i = 0.057
MW-3		131.42	10.30	121.12	1 – 0.037
MW-1		130.16	Well inac	cessible	
MW-2	04/13/00	129.96	7.25	122.71	Not Calculated
MW-3		131.42	8.15	123.27	
MW-1		130.16	10.14	120.02	S85°W
MW-2	06/23/00*	129.96	11.21	118.75	i = 0.033
MW-3		131.42	10.83	120.59	1 – 0.033
MW-1		130.16	11.00	119.16	Due West
MW-2	07/13/00	129.96	12.15	117.81	i = 0.04
MW-3		131.42	11.55	119.87	1 – 0.04
MW-1		130.16	13.50	116.66	N85°W
MW-2	10/19/00	129.96	15.79	114.17	i = 0.03
MW-3		131.42	13.82	117.60	1 – 0.03
MW-1		130.16	7.01	123.15	N80°W
MW-2	03/30/01	129.96	8.36	121.60	i = 0.04
MW-3		131.42	8.45	122.97	1 = 0.04
MW-1		130.16	13.23	116.93	S85°W
MW-2	09/11/01	129.96	15.43	114.53	i = 0.07
MW-3		131.42	13.42	118.00	1= 0.07
MW-1		130.16	14.23	115.93	COUOM
MW-2	10/16/01	129.96	16.46	113.50	S80°W
MW-3		131.42	14.40	117.02	i = 0.06
MW-1		130.16	Well inac	cessible	
MW-2	11/13/01	129.96	9.21	120.75	Not calculated
MW-3		131.42	12.18	119.24	1
MW-1		130.16	5.19	124.97	NOOOM
MW-2	12/12/01	129.96	6.40	123.56	N80°W
MW-3		131.42	6.71	124.71	i = 0.05

Table 5: Groundwater Flow Direction and Gradient 1599 Hampton Way, Santa Rosa, California

Well #	Date	Top of Casing Elevation (feet > msl)	Depth to Water (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction and Gradient (i)
MW-1		130.16	3.35	126.81	N75°W
MW-2	01/15/02	129.96	4.33	125.63	i = 0.04
MW-3		131.42	4.99	126.43	1-0.04
MW-1		130.16	6.17	123.99	N70°W
MW-2	02/12/02	129.96	7.10	122.86	i = 0.06
MW-3		131.42	7.98	123.44	1 – 0.06
MW-1		130.16	Well inac	cessible	
MW-2	03/12/02	129.96	5.87	124.09	Not calculated
MW-3		131.42	7.33	124.09	
MW-1		130.16	8.32	121.84	N85°W
MW-2	04/16/02	129.96	9.61	120.35	i = 0.05
MW-3	1	131.42	9.52	121.90	1 – 0.03
MW-1		130.16	9.28	120.88	N80°W
MW-2	05/14/02	129.96	10.45	119.51	i = 0.03
MW-3		131.42	10.55	120.87	1 – 0.03
MW-1		130.16	10.55	119.61	
MW-2	06/11/02	129.96	11.73	118.23	Westerly
MW-3		131.42	11.30	120.12	
MW-1		130.16	11.96	118.20	S80°W
MW-2	07/16/02	129.96	13.45	116.51	i = 0.02
MW-3	1	131.42	12.35	119.07	1 = 0.02
MW-1		130.16	12.75	117.41	S80°W
MW-2	08/13/02	129.96	14.42	115.54	i = 0.02
MW-3	1	131.42	13.04	118.38	1 - 0.02
MW-1		130.16	10.14	120.02	
MW-2	1	129.96	11.65	118.31	Westerly
MW-3	11/13/02	131.42	13.05	118.37	i = 0.04
MW-4		130.65	11.56	119.09	1 – 0.04
MW-5		129.94	12.26	117.68	
MW-1		130.16	Well inac	cessible	
MW-2		129.87	6.99	122.88	Westerly
MW-3	02/12/03*	131.33	7.45	123.88	i = 0.01
MW-4	02/12/03	130.35	6.45	123.90	1 – 0.01
MW-5		129.84	6.89	122.95	

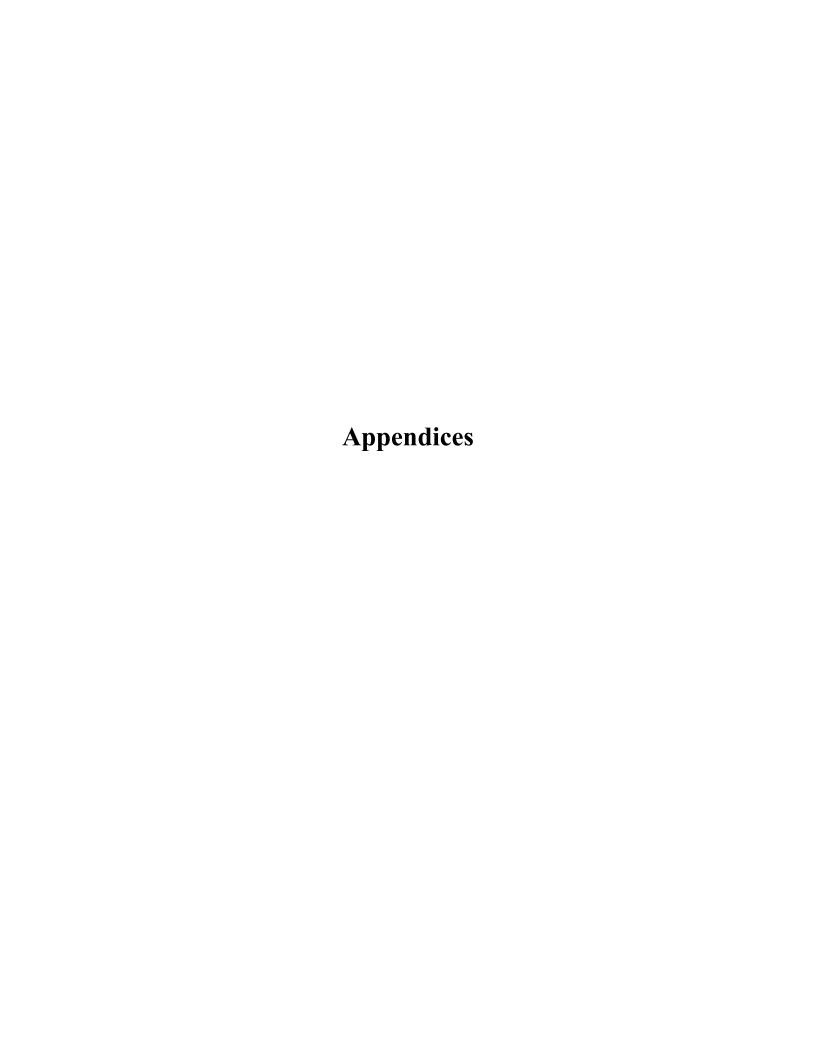
Table 5: Groundwater Flow Direction and Gradient 1599 Hampton Way, Santa Rosa, California

Well#	Date	Top of Casing Elevation (feet > msl)	Depth to Water (feet)	Water Level Elevation (feet > msl)	Groundwater Flow Direction and Gradient (i)
MW-1		130.16*	Well inac	cessible	
MW-2		129.87	5.10	124.77	Westerly
MW-3	05/06/03	131.33	6.91	124.42	i = 0.01
MW-4		130.35	5.25	125.10	1 – 0.01
MW-5		129.84	5.69	124.15	
MW-1		130.16*	11.70	118.46	
MW-2		129.87	13.10	116.77	Southwesterly
MW-3	08/15/03	131.33	12.05	119.28	i = 0.02
MW-4		130.35	11.95	118.40	1-0.02
MW-5		129.84	11.85	117.99	
MW-1		130.16*	5.78	124.38	
MW-2		129.87	6.68	123.19	Southerly
MW-3	01/26/04	131.33	7.12	124.21	i = 0.03
MW-4		130.35	6.71	123.64	1 – 0.03
MW-5		129.84	6.59	123.25	
MW-1		130.16*	7.07	123.09	
MW-2		129.87	7.64	123.19	Southwesterly
MW-3	08/30/05	131.33	9.43	124.21	i = 0.01
MW-4		130.35	9.10	123.64	1 – 0.01
MW-5		129.84	5.51	123.25	

^{*} All MWs except MW-1 (inaccessible) resurveyed on this date. Therefore MW-1 was not used for groundwater flow direction and gradient calculations.

Table 6: Sensitive Site Receptor Survey Results 1599 Hampton Way, Santa Rosa, California

Address	Well Y/N	Use	Water Utility Customer Y/N	Comments/Source
1503 Hampton Way	N		Y	Water utility records
1524 Hampton Way	?		N	Tenant did not know well status. Presume water supply from on- site or adjacent well.
1572 Hampton Way	Y	Domestic*	N	* Tenant uses bottled drinking water. He understands that on- site well was shown to be contaminated during investigation of nearby site several years ago.
1589 Hampton Way	N		Y	Water utility records
1594 Hampton Way 1596 Hampton Way	Y	Domestic	N	some tenants use bottled drinking water, others unaware of water supply source.
1595 Hampton Way	Y	Domestic*	N	* Tenant uses bottled drinking water.
1599 Hampton Way	N*		N	* Tenants believe that water source is an adjacent well.
1700 Hampton Way	Y	Irrigation	Y	Water utility records
1511 Sebastopol Rd.	N		Y	Water utility records
1569 Sebastopol Rd.	N		Y	Water utility records
1583 Sebastopol Rd.	?		N	Not contacted
1585 Sebastopol Rd.	Y	Irrigation	Y	Water utility records
1587 Sebastopol Rd.	Y	Irrigation	Y	Water utility records
1591 Sebastopol Rd.	N		Y	Water utility records
1611 Sebastopol Rd.	N		Y	Water utility records
1665 Sebastopol Rd.	N		Y	Water utility records
1701 Sebastopol Rd.	N		Y	Water utility records
1723, 1755 Sebastopol Rd.	Y	Irrigation	Y	Water utility records
1733 Sebastopol Rd.	N		Y	Water utility records
1558 Sebastopol Rd.	N		Y	Water utility records
1562 Sebastopol Rd.	Y	Domestic	N	Tenant interview
1580 Sebastopol Rd.	N		Y	Water utility records
1600-1630 Sebastopol Rd.	N		Y	Water utility records
1660 Sebastopol Rd.	N*		N	* No well on site, according to long-time next-door resident.
1680 Sebastopol Rd.	N		Y	Water utility records
1720 Sebastopol Rd.	N		Y	Water utility records



Appendix A

Well Purge Records, dated August 30, 2005

PURGING METHOD PURGING METHOD SAMPLING METHOD METHOD		S E N	IGIN	NEEF	R S		20	PURGE 05 - 3rd Qu	ıarter	RD		WELL NUMBER MW-1
PURGING MATTHOD MATT	PROJECT		Phil Jo	ohnson						Hampton		RECORDED BY Amy Yardley
CASING DIAMETER (D _c): 2.0 DEPTH TO: WATER (ft): 7.07 NAPL: n.a.* 0.49 NAPL THICKNESS: n.a.* SCREEN DEPTH: TOP: 4.5 BOTTOM: 18.5 TOTAL DEPTH (TD _c): 18.50 Diameters in (inches): Depths in (feet) ONE CASING VOLUME: ITD _C + II 3.14 (D _c / 2)*] 7/48 galith*: 1.79 gallons CUMULATIVE DATE OF SAMPLING: WEATHER: Clear TAGGED WATER LEVELS FROM TOC: 7.07 / 7.07 TAGGED WATER FROM TOC: 19.38 PURGE VOLUME (3 CASING VOLUMES): 5.4 gallons DEPTH TO WATER FOR 80% RECHARGE: 9.26 ft. below TOC TIME OF SAMPLING: 14:10 DEPTH TO WATER AT TIME OF SAMPLING: 8.62 ft. below TOC APPEARANCE OF SAMPLE: Clear LABORATORY: Analytical Sciences SEE CHAIN OF CUSTODY FORM FOR ANALYTICAL INFORMATION. PURGING DATA TIME WATER COMMENT: COMMENT: TIME BEGIN FINISH G(GAL) ANATER COMMENT: COMMENT: TIME BEGIN FINISH CASING VOLUMES COMMENT: COMMENT: TIME BEGIN FINISH CASING VOLUMES CASING PH CONDUC- TIVITY (mmbos/cm) TURBIDITY TEMPER (NTU) (C) TURBIDITY TEMPER DISSOLVED OXYGEN (C) OXYGEN (C) DISSOLVED OXYGEN (C) DATE BEGIN FINISH COMMENT: COMME	SUBMERS BAILER		<i>MET</i>	THOD	METHOL		for 2" dia. wells), until water parameters (pH, (±10%), or until dry.			sing volume pH, temp., o	s (or 5 gallons minimu	
TIME	CASING DEPTH T WATEL NAPL: NAPL TH SCREEN TOP: BOTTO TOTAL D Diameters in	CO: R (h): ICKNESS: DEPTH: DM: EPTH (TDc n (inches): De	7.0 n.a n.a 4.5 18. 18.5): 18.5	7 * -0.49 5 5	h V	GROUND (FM. SURFACE (FM. SURFAC	WEATHE TAGGED TAGGED PURGE V DEPTH T TIME OF DEPTH T APPEARA LABORA	R: WATER LEV WELL DEPT OLUME (3 C O WATER FO SAMPLING: O WATER A' ANCE OF SAI	TH FROM TO ASING VOLU OR 80% REC T TIME OF S MPLE:	C:	7 5. 9.26 f 8.62 f Analyt	Clear .07 / 7.07 19.38 4 gallons t. below TOC 14:10 t. below TOC Clear tical Sciences
8/30/05 13:08 13:10 2 2 1.12 7.26 0.488 121 22.4 2.62 8/30/05 13:10 13:12 2 4 2.24 6.95 0.490 27 22.0 1.35 8/30/05 13:12 13:13 2 6 3.36 6.89 0.460 50 21.0 1.17	DATE	TIN	ИE	REMOVED	TOTAL F	REMOVED	рН	CONDUC- TIVITY	TURBIDITY	TEMPER- ATURE	OXYGEN	COMMENTS
8/30/05 13:10 13:12 2 4 2.24 6.95 0.490 27 22.0 1.35 8/30/05 13:12 13:13 2 6 3.36 6.89 0.460 50 21.0 1.17	8/30/05				2	1 12	7.26	, ,	121			
8/30/05 13:12 13:13 2 6 3.36 6.89 0.460 50 21.0 1.17												
	8/30/05	13:12	13:13	2	6	3.36	6.89	0.460	50	21.0	1.17	

SEN	I G I I	NEE	RS		20	005 - 3rd Qu	ıarter	RD		WELL NUMBER MW-2
	Phil Jo	ohnson					SITE 1599	Hampton		RECORDED BY Amy Yardley
MP SIBLE PUMP	<i>MET</i>	THOD			for 2" dia. wells), until water parameters (pH, (±10%), or until dry. REMARKS				pH, temp., o	cond.) have stabilized
TO: ER (h): HICKNESS: N DEPTH: OM: DEPTH (TDc in (inches): De	7.6 n.a n.a 5.0 20. 20.epths in (feet)	* -0.28 * 0.00	h h	GROUND (FM. SURFACE) H TD _C SCREEN INTERVAL	WEATHE TAGGED TAGGED PURGE V DEPTH T TIME OF DEPTH T APPEARV LABORA	ER: WATER LEV WELL DEPT /OLUME (3 C. O WATER FO SAMPLING: O WATER A' ANCE OF SAM TORY:	TH FROM TO ASING VOLU OR 80% REC T TIME OF S MPLE:	C:	5. 10.06 8.03 f	S/30/2005 Clear .65 / 7.64 19.55 9 gallons ft. below TOC 13:30 ft. below TOC Clear tical Sciences RMATION.
TIP	ИE	WATER REMOVED (GAL)			рН	CONDUC- TIVITY (mmhos/cm)	TURBIDITY (NTU)	TEMPER- ATURE (°C)	DISSOLVED OXYGEN (ppm)	COMMENTS
11:45	11:47	2	2	1.01	6.89	0.522	60	23.5	1.30	
11:47	11:48	2	4	2.03	6.75	0.575	10	22.9	1.73	
11.70				5.04	0.07	0.400				
	MP DIAMETER TO: R (h): HICKNESS: I DEPTH: OM: DEPTH (TDc In (inches): De ING VOLUME 3.14 (Dc / 2) ²) PURGIN TIM BEGIN 11:45	Phil Jo PUR MET MP SIBLE PUMP DIAMETER (Dc): 2.0 TO: 7.6 n.a HICKNESS: n.a I DEPTH: 5.0 DEPTH (TDc): 20.0 In (inches): Depths in (feet) ING VOLUME: 3.14 (Dc / 2)²] [7.48 gal/ft²]: PURGING DATA TIME BEGIN FINISH 11:45 11:47 11:47 11:48	Phil Johnson PURGING METHOD MP	PURGING METHOD SAMPLINA METHOD MP X SIBLE PUMP X TO: X R (h): 7.64 n.a.* -0.28 HICKNESS: n.a.* I DEPTH: 5.0 DOM: 20.0 DEPTH (TDc): 20.00 In (inches): Depths in (feet) ING VOLUME: 3.14 (Dc / 2)²] [7.48 gal/ft²]: 1.97 gallons PURGING DATA CUML TOTAL F BEGIN FINISH WATER REMOVED (GAL) BEGIN FINISH GAL 11:45 11:47 2 2 11:47 11:48 2 4	PHIL Johnson PURGING SAMPLING METHOD	Phil Johnson	Phil Johnson	Phil Johnson	Phil Johnson	Phil Johnson

	S E N	I G I I	NEEF	RS		20	PURGE 105 - 3rd Qu	ıarter	RD		WELL NUMBER MW-3
PROJECT		Phil Jo	ohnson			JOB NUMBE. 01203	R 3 14.00	SITE 1599	Hampton		RECORDED BY Amy Yardley
HAND PUN SUBMERS BAILER OTHER	MP IBLE PUMP	<i>MET</i>	GING CHOD	SAMPLIN METHOL		PURGING CRITERIA Minimum of 3 w. for 2" dia. wells), until water parar (±10%), or until dry. REMARKS * Oil/water interface probe used to			wetted car rameters (sing volume pH, temp., o	s (or 5 gallons minimu
CASING I DEPTH T WATEI NAPL: NAPL TH SCREEN TOP: BOTTO TOTAL D Diameters in	R (h): ICKNESS: DEPTH: DM: EPTH (TDc n (inches): De	9.4 n.a n.a 5.0 20. pths in (feet)	3 * -0.18	<u> </u>	GROUND (FM. SURFACE (FM. SURFAC	WEATHE TAGGED TAGGED PURGE V DEPTH T TIME OF DEPTH T APPEARA LABORA	WATER LEV WELL DEPT OLUME (3 C O WATER FO SAMPLING: O WATER A' ANCE OF SAI	TH FROM TO ASING VOLU OR 80% REC T TIME OF S MPLE:	C:	5. 11.51 10.19	c/30/2005 Clear .41 / 9.43 19.82 1 gallons ft. below TOC 13:55 ft. below TOC Clear tical Sciences RMATION.
DATE	PURGIN TIM BEGIN		WATER REMOVED (GAL)		CASING VOLUMES	рН	CONDUC- TIVITY (mmhos/cm)	TURBIDITY (NTU)	TEMPER- ATURE (°C)	DISSOLVED OXYGEN (ppm)	COMMENTS
8/30/05	12:13	12:14	1	1	0.59	7.51	0.477	598	21.7	3.09	
8/30/05	12:14	12:16	2	3	1.77	7.28	0.526	365	21.9	2.23	
	12:16	12:18		5	2.95	6.94	0.525	376	21.6	1.21	

S C	SEN	1 G I 1	NEEF	R S			PURGE 005 - 3rd Qu	_	RD		WELL NUMBER MW-4
PROJECT						JOB NUMBE	R	SITE			RECORDED BY
		Phil Jo	ohnson				314.00		Hampton	•	Amy Yardley
HAND PUI SUBMERS BAILER	MP SIBLE PUMP	<i>MET</i>	GING PHOD	SAMPLIN METHOI		for 2" dia (±10%), o REMARKS * Oil/wat	n. wells), unt or until dry.	til water pa	rameters (pH, temp.,	es (or 5 gallons minimus cond.) have stabilized MLE = Meter Limit
OTHER						LACCCUC	.,				
CASING	DIAMETER	(D _c):2.0)	→ D _c	L	DATE OF	SAMPLING:			8	3/30/2005
DEPTH 1			1		GROUND SURFACE (FM)	WEATHE	R:				Clear
WATE	R (h):	9.1	0 🕌	T			WATER LEV	ELS FROM	TOC:	g	0.11 / 9.10
NAPL:		n.a	.* -0.72	h		TAGGED	WELL DEPT	H FROM TO	C:		20
NAPL TH	ICKNESS:	n.a	.*		H	PURGE V	OLUME (3 C	ASING VOLU	JMES):	5	.0 gallons
SCREEN	DEPTH:			1			O WATER F				ft. below TOC
TOP:		5.0)		$TD_{\rm C}$		SAMPLING:	01100701120			14:00
BOTTO	OM:	20.	0	<u>*] </u>	[] <u> </u>				AMPLING:	0.00	
TOTAL D	EPTH (TD _c	20.0	00		SCREEN		O WATER A		AMPLING.	9.03	ft. below TOC
Diameters in	n (inches) : De	epths in (feet)			INTERVAL		ANCE OF SAI	MPLE:			Clear
ONE CASI	NG VOLUME	:			<u>}</u> ——▼	LABORA	ΓORY:			Analy	tical Sciences
[TD _c - H] [3	3.14 (D _C / 2) ²]	[7.48 gal/ft ³]:	1.66 gallor	ns	_	SEE CHA	IN OF CUST	ODY FORM I	OR ANALY	TICAL INFO	RMATION.
	PURGIN	IG DATA			JLATIVE REMOVED		WATER	CHARACTE	ERISTICS		COMMENTS
DATE		ME	WATER REMOVED (GAL)	GAL	CASING VOLUMES	рН	CONDUC- TIVITY (mmhos/cm)	TURBIDITY (NTU)	TEMPER- ATURE (°C)	DISSOLVED OXYGEN (ppm)	
0.00.00	BEGIN	FINISH			1.00	- 10	,				
8/30/05	12:50	12:52	2	4	1.20	7.10	0.524	*MLE	23.0	6.01	
8/30/05 8/30/05	12:52 12:53	12:53 12:55	2	6	3.61	6.74	0.623	339 84	22.6	1.90	
0/20/03	12.30	12.33			3.01	0.07	0.020	04	21.0	1.50	
										1	

S C	S E N	G 1	NEEF	RS			PURGE 005 - 3rd Qu	_	RD		WELL NUMBER MW-5
PROJECT						JOB NUMBE		SITE			RECORDED BY
		Phil Jo	ohnson				3314.00		Hampton	•	Amy Yardley
HAND PUI	MP SIBLE PUMP	<i>MET</i>	GING PHOD	SAMPLIN METHOL		for 2" dia (±10%), o	n. wells), unt or until dry.	til water pa	rameters (pH, temp.,	es (or 5 gallons minimus cond.) have stabilized
BAILER OTHER				X		* Oil/wat Exceeded	er interface l, i.e. (>999	probe used NTU's).	to check f	for NAPLs;	MLE = Meter Limit
CASING	DIAMETER	(D _c): 2.0)	1.5		DATE OF	SAMPLING:			8	3/30/2005
DEPTH 1	го:			\rightarrow D_{C}	GROUND SURFACE (FM)	WEATHE	R:				Clear
WATE	R (h):	5.5	<u> </u>	<u> </u>	SURFACE		WATER LEV	ELS FROM	TOC:	5	5.51 / 5.51
NAPL:		n.a	* -0.49	h		TAGGED	WELL DEPT	H FROM TO	C:		20
NAPL TH	IICKNESS:	n.a	.*	 	$\left\{\begin{array}{cc} \\ \\ \end{array}\right\}$	PURGE V	OLUME (3 C	ASING VOLU	JMES):	6.	.9 gallons
SCREEN	DEPTH:						O WATER F				ft. below TOC
TOP:		5.0)] []_	TD_{c}	TIME OF	SAMPLING:				13:45
BOTTO	OM:	20.	0	<u> </u>			O WATER A	T TIME OF S	AMPLING:	8 56	ft. below TOC
TOTAL D	EPTH (TD	;):20.0	00	<u> </u>	SCREEN		ANCE OF SAI		AWII EII VO.	0.00	Clear
Diameters in	n (inches) : De	epths in (feet)		==	INTERVAL			VII LL.		A lv	
	NG VOLUME 3.14 (D _c / 2) ²]		2.28 gallor	ns		LABORA SEE CHA	IORY: JIN OF CUST	ODY FORM I	 FOR ANALY		tical Sciences RMATION.
	PURGIN	IG DATA			JLATIVE REMOVED		WATER	CHARACTE	RISTICS		COMMENTS
DATE	TIT	ME	WATER		CASING	-11	CONDUC-	TURBIDITY	TEMPER-	DISSOLVED	-
DATE	BEGIN	FINISH	REMOVED (GAL)	GAL	VOLUMES	pН	TIVITY (mmhos/cm)	(NTU)	ATURE (°C)	OXYGEN (ppm)	
8/30/05	11:58	11:59	1	1	0.44	7.21	0.650	*MLE	21.9	1.54	
8/30/05	11:59	12:01	2	3	1.31	6.81	0.675	410	23.2	1.41	
8/30/05	12:01	12:03	2	5	2.19	6.88	0.684	351	23.4	3.03	
8/30/05	12:03	12:04	2	7	3.06	6.97	0.696	202	23.0	1.93	
											1

Appendix B

Analytical Sciences Report #5083102 dated September 9, 2005 Certificates of Disposal, dated September 1, 2005



September 09, 2005

Kevin Coker SCS Engineers 3645 Westwind Blvd Santa Rosa CA, 95403

Dear Kevin,

Enclosed you will find Analytical Sciences' final report 5083102 for your 1599 Hampton Way project. An invoice for this work is enclosed.

Should you or your client have any questions regarding this report please contact me at your convenience. We appreciate you selecting Analytical Sciences for this work and look forward to serving your analytical chemistry needs on projects in the future.

Sincerely,

Analytical Sciences

Mark A. Valentini, Ph.D.

Laboratory Director

P.O. Box 750336 Petaluma, CA 94975-0336 Telephone: (707) 769-3128



Report Date: September 09, 2005

Laboratory Report

Kevin Coker SCS Engineers 3645 Westwind Blvd Santa Rosa CA, 95403

Project Name: **1599 Hampton Way 01203314.00**

Lab Project: **5083102**

This 18 page report of analytical data has been reviewed and approved for release.

Mark A. Valentini, Ph.D.

Mark A. Valentini

Laboratory Director



TPH Gasoline in Water

Lab#	Sample ID	Compound Name		Result (ug/L)	RDL (ug/L)
5083102-01	MW-1	Gasoline		280	50
Date Sampled:	08/30/05	Date Analyzed:	08/31/05		QC Batch: B000045
Date Received:	08/31/05	Method:	EPA 5030/8015		

TPH Gasoline in Water

Lab#	Sample ID MW-2	Compound Name Gasoline		Result (ug/L)	RDL (ug/L) 50
Date Sampled: Date Received:	08/30/05 08/31/05	Date Analyzed: Method:	08/31/05 EPA 5030/8015		Batch: B000045

TPH Gasoline in Water

Lab#	Sample ID	Compound Name		Result (ug/L	RDL (ug/L)
5083102-03	MW-3	Gasoline		ND	50
Date Sampled:	08/30/05	Date Analyzed:	08/31/05		QC Batch: B000045
Date Received:	08/31/05	Method:	EPA 5030/8015		

TPH Gasoline in Water

Lab# 5083102-04	Sample ID MW-4	Compound Name Gasoline		Result (ug/L)	RDL (ug/L) 50
Date Sampled: Date Received:	08/30/05 08/31/05	Date Analyzed: Method:	08/31/05 EPA 5030/8015	QCE	Batch: B000045



TPH Gasoline in Water

Lab# 5083102-05	Sample ID MW-5	Compound Name Gasoline		Result (ug/L) ND	RDL (ug/L) 50
Date Sampled: Date Received:	08/30/05 08/31/05	Date Analyzed: Method:	08/31/05 EPA 5030/8015	~	Batch: B000045



Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
083102-01	MW-1	Dichlorodifluoromethane	ND	1.0
		Chloromethane	ND	1.0
		Vinyl chloride	ND	1.0
		Bromomethane	ND	1.0
		Chloroethane (CE)	ND	1.0
		Trichlorofluoromethane	ND	1.0
		1,1-Dichloroethene	ND	1.0
		Methylene Chloride	ND	1.0
		trans-1,2-Dichloroethylene	ND	1.0
		1,1-Dichloroethane	ND	1.0
		cis-1,2-Dichloroethylene	ND	1.0
		2,2-Dichloropropane	ND	1.0
		Chloroform	ND	1.0
		Bromochloromethane	ND	1.0
		1,1,1-Trichloroethane	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Carbon Tetrachloride	ND	1.0
		Benzene	ND	1.0
		Trichloroethene	ND	1.0
		1,2-Dichloropropane	ND	1.0
		Dibromomethane	ND	1.0
		Bromodichloromethane	ND	1.0
		Toluene	ND	1.0
		1,1,2-Trichloroethane	ND	1.0
		1,3-Dichloropropane	ND	1.0
		Dibromochloromethane	ND	1.0
		Tetrachloroethene	ND	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		Chlorobenzene	ND	1.0
		1,1,1,2-Tetrachloroethane	ND	1.0
		Ethylbenzene	1.0	1.0
		Styrene	ND	1.0
		o-Xylene	ND	1.0
		Bromoform	ND	1.0
		1,1,2,2-Tetrachloroethane	ND	1.0
		1,2,3-Trichloropropane	ND	1.0
		Bromobenzene	ND	1.0
		Propylbenzene	1.9	1.0
		2-Chlorotoluene	ND	1.0
		4-Chlorotoluene	ND	1.0
		1,3,5-Trimethylbenzene	ND	1.0
		tert-Butylbenzene	ND	1.0
		1,2,4-Trimethylbenzene	ND ND	1.0
		sec-Butylbenzene	ND ND	1.0
		1,3-Dichlorobenzene	ND ND	1.0
		1,4-Dichlorobenzene	ND ND	1.0
		1,2-Dichlorobenzene 4-Isopropyltoluene	ND ND	1.0 1.0
		4-Isonronyltolliene	INI J	1 ()

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Lab#	Sample ID	Compo	und Name		Result (ug/L)	RDL (ug/L)
5083102-01	MW-1	1,2,4-Tı	richlorobenzene		ND	1.0
		Naphtha	alene		ND	1.0
		Hexach	lorobutadiene		ND	1.0
		1,2,3-Tı	richlorobenzene		ND	1.0
		tert-But	yl alcohol (TBA)		ND	25
		Methyl-	tert-butyl ether (N	MTBE)	ND	1.0
		Diisopr	opyl Ether (DIPE))	ND	1.0
		Ethyl te	rt-Butyl Ether (E'	ГВЕ)	ND	1.0
		Tert-An	nyl Methyl Ether	(TAME)	ND	1.0
Su	irrogates	Result (ug/L)	% Recove	ery _	Acceptance Range	(%)
Dibromofluoron	nethane	20.4	102		70-130	
Toluene-d8		20.8	104		70-130	
4-Bromofluorob	enzene	19.5	98		70-130	
Date Sampled:	08/30/05		Date Analyzed:	09/02/05	QC 1	Batch: B000037
Date Received:	08/31/05		Method:	EPA 8260B		



Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083102-02	MW-2	Dichlorodifluoromethane	ND	1.0
		Chloromethane	ND	1.0
		Vinyl chloride	ND	1.0
		Bromomethane	ND	1.0
		Chloroethane (CE)	ND	1.0
		Trichlorofluoromethane	ND	1.0
		1,1-Dichloroethene	ND	1.0
		Methylene Chloride	ND	1.0
		trans-1,2-Dichloroethylene	ND	1.0
		1,1-Dichloroethane	ND	1.0
		cis-1,2-Dichloroethylene	ND	1.0
		2,2-Dichloropropane	ND	1.0
		Chloroform	ND	1.0
		Bromochloromethane	ND	1.0
		1,1,1-Trichloroethane	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Carbon Tetrachloride	ND	1.0
		Benzene	ND	1.0
		Trichloroethene	ND	1.0
		1,2-Dichloropropane	ND	1.0
		Dibromomethane	ND	1.0
		Bromodichloromethane	ND	1.0
		Toluene	ND	1.0
		1,1,2-Trichloroethane	ND	1.0
		1,3-Dichloropropane	ND	1.0
		Dibromochloromethane	ND	1.0
		Tetrachloroethene	ND	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		Chlorobenzene	ND	1.0
		1,1,1,2-Tetrachloroethane	ND	1.0
		Ethylbenzene	ND	1.0
		Styrene	ND	1.0
		o-Xylene	ND	1.0
		Bromoform	ND	1.0
		1,1,2,2-Tetrachloroethane	ND	1.0
		1,2,3-Trichloropropane	ND	1.0
		Bromobenzene	ND	1.0
		Propylbenzene	ND	1.0
		2-Chlorotoluene	ND	1.0
		4-Chlorotoluene	ND	1.0
		1,3,5-Trimethylbenzene	ND	1.0
		tert-Butylbenzene	ND	1.0
		1,2,4-Trimethylbenzene	ND	1.0
		sec-Butylbenzene	ND	1.0
		1,3-Dichlorobenzene	ND	1.0
		1,4-Dichlorobenzene	ND	1.0
		1,2-Dichlorobenzene	ND	1.0
		4-Isopropyltoluene	ND	1.0
		1,2-Dibromo-3-chloropropane	ND	1.0

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Lab#	Sample ID	Compo	und Name		Result (ug/L)	RDL (ug/L)
5083102-02	MW-2	1,2,4-Tı	richlorobenzene		ND	1.0
		Naphtha	alene		ND	1.0
		Hexach	lorobutadiene		ND	1.0
		1,2,3-Tı	richlorobenzene		ND	1.0
		tert-But	yl alcohol (TBA)		ND	25
		Methyl-	tert-butyl ether (N	MTBE)	ND	1.0
		Diisopr	opyl Ether (DIPE)	ND	1.0
		Ethyl te	ert-Butyl Ether (E'	ГВЕ)	ND	1.0
		Tert-An	nyl Methyl Ether	(TAME)	ND	1.0
Surre	ogates	Result (ug/L)	% Recove	ery	Acceptance Range	: (%)
Dibromofluorome	thane	20.7	104	.	70-130	
Toluene-d8		21.3	106		70-130	
4-Bromofluoroben	zene	19.2	96		70-130	
Date Sampled:	rate Sampled: 08/30/05 Date Analyzed: 09/02/05				QC	Batch: B000037
Date Received:	08/31/05		Method:	EPA 8260B		



Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
083102-03	MW-3	Dichlorodifluoromethane	ND	1.0
		Chloromethane	ND	1.0
		Vinyl chloride	ND	1.0
		Bromomethane	ND	1.0
		Chloroethane (CE)	ND	1.0
		Trichlorofluoromethane	ND	1.0
		1,1-Dichloroethene	ND	1.0
		Methylene Chloride	ND	1.0
		trans-1,2-Dichloroethylene	ND	1.0
		1,1-Dichloroethane	ND	1.0
		cis-1,2-Dichloroethylene	ND	1.0
		2,2-Dichloropropane	ND	1.0
		Chloroform	ND	1.0
		Bromochloromethane	ND	1.0
		1,1,1-Trichloroethane	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Carbon Tetrachloride	ND	1.0
		Benzene	ND	1.0
		Trichloroethene	ND	1.0
		1,2-Dichloropropane	ND	1.0
		Dibromomethane	ND	1.0
		Bromodichloromethane	ND	1.0
		Toluene	ND	1.0
		1,1,2-Trichloroethane	ND	1.0
		1,3-Dichloropropane	ND	1.0
		Dibromochloromethane	ND	1.0
		Tetrachloroethene	ND	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		Chlorobenzene	ND	1.0
		1,1,1,2-Tetrachloroethane	ND	1.0
		Ethylbenzene	ND	1.0
		Styrene	ND	1.0
		o-Xylene	ND	1.0
		Bromoform	ND	1.0
		1,1,2,2-Tetrachloroethane	ND	1.0
		1,2,3-Trichloropropane	ND	1.0
		Bromobenzene	ND	1.0
		Propylbenzene	ND	1.0
		2-Chlorotoluene	ND	1.0
		4-Chlorotoluene	ND	1.0
		1,3,5-Trimethylbenzene	ND	1.0
		tert-Butylbenzene	ND ND	1.0
		1,2,4-Trimethylbenzene	ND ND	1.0
		sec-Butylbenzene	ND	1.0
		1,3-Dichlorobenzene	ND	1.0
		1,4-Dichlorobenzene	ND	1.0
		1,2-Dichlorobenzene	ND	1.0
		4-Isopropyltoluene	ND	1.0
		1,2-Dibromo-3-chloropropane	ND	1.0

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Lab#	Sample ID	Compo	und Name		Result (ug/L)	RDL (ug/L)
5083102-03	MW-3	1,2,4-Tı	richlorobenzene		ND	1.0
	2.2.,	Naphtha	alene		ND	1.0
		Hexach	lorobutadiene		ND	1.0
		1,2,3-Tı	richlorobenzene		ND	1.0
		tert-But	yl alcohol (TBA)		ND	25
		Methyl-	tert-butyl ether (N	MTBE)	ND	1.0
		Diisopr	opyl Ether (DIPE))	ND	1.0
		Ethyl te	ert-Butyl Ether (ET	ГВЕ)	ND	1.0
		Tert-An	myl Methyl Ether	(TAME)	ND	1.0
Surro	gates	Result (ug/L)	% Recovery		Acceptance Range	(%)
Dibromofluorometh	nane	21.0	105		70-130	
Toluene-d8		21.2	106		70-130	
4-Bromofluorobenz	zene	19.2	96		70-130	
Date Sampled: 0	8/30/05		Date Analyzed:	09/02/05	QC	Batch: B000037
Date Received: 0	8/31/05		Method:	EPA 8260B		



Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
083102-04	MW-4	Dichlorodifluoromethane	ND	1.0
		Chloromethane	ND	1.0
		Vinyl chloride	ND	1.0
		Bromomethane	ND	1.0
		Chloroethane (CE)	ND	1.0
		Trichlorofluoromethane	ND	1.0
		1,1-Dichloroethene	ND	1.0
		Methylene Chloride	ND	1.0
		trans-1,2-Dichloroethylene	ND	1.0
		1,1-Dichloroethane	ND	1.0
		cis-1,2-Dichloroethylene	ND	1.0
		2,2-Dichloropropane	ND	1.0
		Chloroform	ND	1.0
		Bromochloromethane	ND	1.0
		1,1,1-Trichloroethane	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Carbon Tetrachloride	ND	1.0
		Benzene	ND	1.0
		Trichloroethene	ND	1.0
		1,2-Dichloropropane	ND	1.0
		Dibromomethane	ND	1.0
		Bromodichloromethane	ND	1.0
		Toluene	ND	1.0
		1,1,2-Trichloroethane	ND	1.0
		1,3-Dichloropropane	ND	1.0
		Dibromochloromethane	ND	1.0
		Tetrachloroethene	ND	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		Chlorobenzene	ND	1.0
		1,1,1,2-Tetrachloroethane	ND	1.0
		Ethylbenzene	ND	1.0
		Styrene	ND	1.0
		o-Xylene	ND	1.0
		Bromoform	ND	1.0
			ND ND	1.0
		1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane	ND ND	1.0
			ND ND	1.0
		Bromobenzene		
		Propylbenzene	ND	1.0
		2-Chlorotoluene	ND	1.0
		4-Chlorotoluene	ND	1.0
		1,3,5-Trimethylbenzene	ND	1.0
		tert-Butylbenzene	3.1	1.0
		1,2,4-Trimethylbenzene	ND	1.0
		sec-Butylbenzene	ND	1.0
		1,3-Dichlorobenzene	ND	1.0
		1,4-Dichlorobenzene	ND	1.0
		1,2-Dichlorobenzene	ND	1.0
		4-Isopropyltoluene	ND	1.0
		1,2-Dibromo-3-chloropropane	ND	1.0



Lab#	Sample ID	Compound Name			Result (ug/L)	RDL (ug/L)	
5083102-04	MW-4	1,2,4-Ti	richlorobenzene		ND	1.0	
		Naphtha	alene		ND	1.0	
		Hexach	lorobutadiene		ND	1.0	
		1,2,3-Ti	richlorobenzene		ND	1.0	
		tert-But	yl alcohol (TBA)		ND	25	
		Methyl-	tert-butyl ether (N	MTBE)	ND	1.0	
		Diisopr	opyl Ether (DIPE))	ND	1.0	
		Ethyl te	rt-Butyl Ether (E	ГВЕ)	ND	1.0	
		Tert-An	nyl Methyl Ether	(TAME)	ND	1.0	
Su	irrogates	Result (ug/L)	% Recove	ery	Acceptance Range	2 (%)	
Dibromofluoron	nethane	21.0	105		70-130		
Toluene-d8		21.3	106		70-130		
4-Bromofluorob	enzene	19.0	95		70-130		
Date Sampled:	08/30/05		Date Analyzed:	09/02/05	QC	Batch: B000037	
Date Received:	08/31/05		Method:	EPA 8260B			



Lab#	Sample ID	Compound Name	Result (ug/L)	RDL (ug/L)
5083102-05	MW-5	Dichlorodifluoromethane	ND	1.0
		Chloromethane	ND	1.0
		Vinyl chloride	ND	1.0
		Bromomethane	ND	1.0
		Chloroethane (CE)	ND	1.0
		Trichlorofluoromethane	ND	1.0
		1,1-Dichloroethene	ND	1.0
		Methylene Chloride	ND	1.0
		trans-1,2-Dichloroethylene	ND	1.0
		1,1-Dichloroethane	ND	1.0
		cis-1,2-Dichloroethylene	ND	1.0
		2,2-Dichloropropane	ND	1.0
		Chloroform	ND	1.0
		Bromochloromethane	ND	1.0
		1,1,1-Trichloroethane	ND	1.0
		1,2-Dichloroethane (EDC)	ND	1.0
		Carbon Tetrachloride	ND	1.0
		Benzene	ND	1.0
		Trichloroethene	ND	1.0
		1,2-Dichloropropane	ND	1.0
		Dibromomethane	ND	1.0
		Bromodichloromethane	ND	1.0
		Toluene	ND	1.0
		1,1,2-Trichloroethane	ND	1.0
		1,3-Dichloropropane	ND	1.0
		Dibromochloromethane	ND	1.0
		Tetrachloroethene	ND	1.0
		1,2-Dibromoethane (EDB)	ND	1.0
		Chlorobenzene	ND	1.0
		1,1,1,2-Tetrachloroethane	ND	1.0
		Ethylbenzene	ND	1.0
		Styrene	ND	1.0
		o-Xylene	ND	1.0
		Bromoform	ND	1.0
		1,1,2,2-Tetrachloroethane	ND	1.0
		1,2,3-Trichloropropane	ND	1.0
		Bromobenzene	ND	1.0
		Propylbenzene	ND	1.0
		2-Chlorotoluene	ND	1.0
		4-Chlorotoluene	ND	1.0
		1,3,5-Trimethylbenzene	ND	1.0
		tert-Butylbenzene	ND	1.0
		1,2,4-Trimethylbenzene	ND	1.0
		sec-Butylbenzene	ND	1.0
		1,3-Dichlorobenzene	ND	1.0
		1,4-Dichlorobenzene	ND	1.0
		1,2-Dichlorobenzene	ND	1.0
		4-Isopropyltoluene	ND	1.0
		1,2-Dibromo-3-chloropropane	ND	1.0

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Lab#	Sample ID	Compound Name			Result (ug/L)	RDL (ug/L)	
5083102-05	MW-5	1,2,4-T	richlorobenzene		ND	1.0	
		Naphth	alene		ND	1.0	
		Hexach	lorobutadiene		ND	1.0	
		1,2,3-T	richlorobenzene		ND	1.0	
		tert-But	tyl alcohol (TBA)		ND	25	
		Methyl-	-tert-butyl ether (N	MTBE)	ND	1.0	
		Diisopr	opyl Ether (DIPE)	ND	1.0	
		Ethyl te	ert-Butyl Ether (E	ГВЕ)	ND	1.0	
		Tert-Ar	nyl Methyl Ether	(TAME)	ND	1.0	
Su	irrogates	Result (ug/L)	% Recove	ery	Acceptance Range	(%)	
Dibromofluoron	nethane	21.2	106		70-130		
Toluene-d8		21.4	107		70-130		
4-Bromofluorob	enzene	19.3	96		70-130		
Date Sampled:	08/30/05		Date Analyzed:	09/02/05	QC	Batch: B000037	
Date Received:	08/31/05		Method:	EPA 8260B			



Quality Assurance Report

TPH Gasoline in Water

		Reporting		Spike	Source		%REC		RPD	
Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch B000045 - EPA 5030										
Blank (B000045-BLK1)				Prepared	& Analyz	zed: 08/31	/05			
Gasoline	ND	50	ug/L	•	_					
Matrix Spike (B000045-MS1)	So	Source: 5083102-01 P			& Analyz	zed: 08/31				
Benzene	11.0	0.50	ug/L	10.0	1.8	92	70-130			
Toluene	9.62	0.50	ug/L	10.0	0.36	93	70-130			
Ethylbenzene	11.0	0.50	ug/L	10.0	1.2	98	70-130			
Xylenes, total	31.4	1.5	ug/L	30.0	1.2	101	70-130			
Matrix Spike Dup (B000045-MSD1)	So	ource: 5083102	2-01	Prepared	& Analyz	zed: 08/31	/05			
Benzene	11.2	0.50	ug/L	10.0	1.8	94	70-130	2	20	
Toluene	9.81	0.50	ug/L	10.0	0.36	95	70-130	2	20	
Ethylbenzene	11.1	0.50	ug/L	10.0	1.2	99	70-130	1	20	
Xylenes, total	31.5	1.5	ug/L	30.0	1.2	101	70-130	0	20	



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B000037 - EPA 5030B										
Blank (B000037-BLK1)				Prepared	& Analyz	zed: 08/29	0/05			
Dichlorodifluoromethane	ND	1.0	ug/L							
Chloromethane	ND	1.0	ug/L							
Vinyl chloride	ND	1.0	ug/L							
Bromomethane	ND	1.0	ug/L							
Chloroethane (CE)	ND	1.0	ug/L							
Trichlorofluoromethane	ND	1.0	ug/L							
1,1-Dichloroethene	ND	1.0	ug/L							
Methylene Chloride	ND	1.0	ug/L							
trans-1,2-Dichloroethylene	ND	1.0	ug/L							
1,1-Dichloroethane	ND	1.0	ug/L							
cis-1,2-Dichloroethylene	ND	1.0	ug/L							
2,2-Dichloropropane	ND	1.0	ug/L							
Chloroform	ND	1.0	ug/L							
Bromochloromethane	ND	1.0	ug/L							
1,1,1-Trichloroethane	ND	1.0	ug/L							
1,2-Dichloroethane (EDC)	ND	1.0	ug/L							
Carbon Tetrachloride	ND	1.0	ug/L							
Benzene	ND	1.0	ug/L							
Trichloroethene	ND	1.0	ug/L							
1,2-Dichloropropane	ND	1.0	ug/L							
Dibromomethane	ND	1.0	ug/L							
Bromodichloromethane	ND	1.0	ug/L							
Toluene	ND	1.0	ug/L							
1,1,2-Trichloroethane	ND	1.0	ug/L							
1,3-Dichloropropane	ND	1.0	ug/L							
Dibromochloromethane	ND	1.0	ug/L							
Tetrachloroethene	ND	1.0	ug/L							
1,2-Dibromoethane (EDB)	ND	1.0	ug/L							
Chlorobenzene	ND	1.0	ug/L							
1,1,1,2-Tetrachloroethane	ND	1.0	ug/L							
Ethylbenzene	ND	1.0	ug/L							
Styrene	ND	1.0	ug/L							
o-Xylene	ND	1.0	ug/L							
Bromoform	ND	1.0	ug/L							
1,1,2,2-Tetrachloroethane	ND	1.0	ug/L							
1,2,3-Trichloropropane	ND	1.0	ug/L							
Bromobenzene	ND	1.0	ug/L							
Propylbenzene	ND	1.0	ug/L							
2-Chlorotoluene	ND	1.0	ug/L							
4-Chlorotoluene	ND	1.0	ug/L							
1,3,5-Trimethylbenzene	ND	1.0	ug/L							
tert-Butylbenzene	ND	1.0	ug/L							
1,2,4-Trimethylbenzene	ND	1.0	ug/L							

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Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B000037 - EPA 5030B										
Blank (B000037-BLK1)				Prepared	& Analyz	zed: 08/29	9/05			
sec-Butylbenzene	ND	1.0	ug/L	•	_					
1,3-Dichlorobenzene	ND	1.0	ug/L							
1,4-Dichlorobenzene	ND	1.0	ug/L							
1,2-Dichlorobenzene	ND	1.0	ug/L							
4-Isopropyltoluene	ND	1.0	ug/L							
1,2-Dibromo-3-chloropropane	ND	1.0	ug/L							
1,2,4-Trichlorobenzene	ND	1.0	ug/L							
Naphthalene	ND	1.0	ug/L							
Hexachlorobutadiene	ND	1.0	ug/L							
1,2,3-Trichlorobenzene	ND	1.0	ug/L							
tert-Butyl alcohol (TBA)	ND	25	ug/L							
Methyl-tert-butyl ether (MTBE)	ND	1.0	ug/L							
Diisopropyl Ether (DIPE)	ND	1.0	ug/L							
Ethyl tert-Butyl Ether (ETBE)	ND	1.0	ug/L							
Tert-Amyl Methyl Ether (TAME)	ND	1.0	ug/L							
Surrogate: Dibromofluoromethane	20.1		ug/L	20.0		100	70-130			
Surrogate: Toluene-d8	20.2		ug/L	20.0		101	70-130			
Surrogate: 4-Bromofluorobenzene	19.6		ug/L	20.0		98	70-130			
Matrix Spike (B000037-MS1)	Se	ource: 5082603	3-01	Prepared	& Analyz	zed: 08/29	9/05			
1,1-Dichloroethene	18.1	1.0	ug/L	25.0	ND	72	70-130			
Benzene	24.0	1.0	ug/L	25.0	ND	96	70-130			
Trichloroethene	25.1	1.0	ug/L	25.0	ND	100	70-130			
Toluene	26.0	1.0	ug/L	25.0	ND	104	70-130			
Chlorobenzene	26.1	1.0	ug/L	25.0	ND	104	70-130			
Surrogate: Dibromofluoromethane	20.6		ug/L	20.0		103	70-130			
Surrogate: Toluene-d8	20.6		ug/L	20.0		103	70-130			
Surrogate: 4-Bromofluorobenzene	18.9		ug/L	20.0		94	70-130			



Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch B000037 - EPA 5030B										
Matrix Spike Dup (B000037-MSD1)	Sou				& Analyz	zed: 08/29				
1,1-Dichloroethene	18.2	1.0	ug/L	25.0	ND	73	70-130	1	20	
Benzene	24.0	1.0	ug/L	25.0	ND	96	70-130	0	20	
Trichloroethene	25.4	1.0	ug/L	25.0	ND	102	70-130	2	20	
Toluene	26.5	1.0	ug/L	25.0	ND	106	70-130	2	20	
Chlorobenzene	26.2	1.0	ug/L	25.0	ND	105	70-130	1	20	
Surrogate: Dibromofluoromethane	20.7		ug/L	20.0		104	70-130			
Surrogate: Toluene-d8	20.9		ug/L	20.0		104	70-130			
Surrogate: 4-Bromofluorobenzene	19.0		ug/L	20.0		95	70-130			



Notes and Definitions

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

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Lab Project#: 5083102

CA Lab Accreditation #: 2303



Analytical Sciences
P.O. Box 750336, Petaluma, CA 94975-0336
110 Liberty Street, Petaluma, CA 94952
(707) 769-3128

CHAIN OF CUSTODY

LAB SAMPLE # -GLOBAL ID: T0609700055 GEOTRACKER EDF: X Y 7 COOLER TEMPERATURE 5083102 P COMMENTS 200 PAGE SCS ENGINEERS PROJECT NAME: Hampton Way 01203314.00 TURNAROUND TIME (check one) 7 24 Hours 72 Hours SCS ENGINEERS PROJECT NUMBER: NORMAL LAB PROJECT NUMBER: CAM 17 METALS / 5 LUFT METALS EPA 8081 / 8141 / 8082 *BEZLICIDES | BCB.2* M 2230F / EPA 418.1M DOT | H9AT SEMI-VOLATILE HYDROCARBONS EPA 8270 MOBILE LAB 48 Hours 5 DAYS SAME DAY ANALYSIS CHLORINATED FUEL ADDITIVES

ROBINES OXYGENATED EPA 8260B + PB SCAVENGERS Rohnert Park, CA 94928 BILLING INFORMATION + Oxy / Fuel Additives Judith Johnson Trust EPA 8260 Full List 4591 Heath Circle VOLATILE YOLK EPA 8260 (FULL LIST) X Phil Johnson TPH DIESEL / MOTOR OIL M2108 A93 EPA 8015M/8020 × TPH/GAS/BTEX COMPANY NAME: ADDRESS: FAX #: PHONE#: PRESV. YES/NO YES CONT. 3 (w M MATRIX LIQ g ΓIQ CIO LIQ ADDRESS: 3645 WESTWIND BOULEVARD 95403 TIME 8/30/05/210 5/30/ps 300 8|30|05 | 155 5/30/05/14S **CLIENT INFORMATION** 8/30/05/130 SANTA ROSA, CA DATE SAMPLED COMPANY NAME: SCS ENGINEERS FAX #: (707) 544-5769 PHONE#: (707) 546-9461 CONTACT: Kevin Coker CLIENT SAMPLE 1..D. **MW-5 MW-2** MW-3 MW-4 MW-1 TEM F 2 œ

10:37

RECEIVED BY LABORATORY:

SIGNATURES

37

0

TIME:

05

3

DATE:: 8

RELINQUISHED BY:

RECEIVED BY:

RELINQUISHED BY:

RECEIVED BY:

DATE:: DATE::

SIGNATURE

IWM, Inc.

INTEGRATED WASTESTREAM MANAGEMENT, INC. 950 AMES AVENUE, MILPITAS, CA 95035 PHONE: 408.942.8955 FAX: 488.942.1499

CERTIFICATE OF DISPOSAL

Į

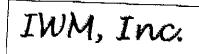
Generator Name: Address:	4591 Health Circle	Facility Name:	Econ-O-Sweep 1599 Hampton Way
	Rohnert Park, CA 94928 Phil Johnson 707-494-5700	Facility Contact:	Santa Rosa CA

IWM Job #: _____95401-DS Description of Waste: 4 Drum(s) of Non-Hazardous Soil Removal Date: 9/1/05 Ticket #: _____RSVRL010905

Transp	porter Information	Dispo	sal Facility Information
Address;	IWM, Inc. 950 Ames Avenue Milpitas, CA 95035	Name: Address:	- vasco Road
Phone:	(408) 942-8955	Phone;	Livermore, CA 94550 (925) 447-0491

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

•	
William T. DeLon William 2. C. For	
Authorized Representative (Print Name and Signature)	9/1/05
	Date



INTEGRATED WASTESTREAM MANAGEMENT, INC. 950 AMES AVENUE, MILPITAS, CA 95035 PHONE: 408.942,8955 FAX: 408.942,1499

CERTIFICATE OF DISPOSAL

Generator Name: Address:	Judith Johnson Trust 4591 Health Circle	Facility Name:	Econ-O-Sweep
	Rohnert Park, CA 94928 Phil Johnson 707-494-5700		Santa Rosa, CA Amy Yardley, SCS Engineers 707-546-9461

IWM Job #: ____ 95402-DW Description of Waste: 2 Drum(s) of Non-Hazardous Water/Rinsate Removal Date: 9/1/05 Ticket #: SP010905-MISC

Transp	orter Information	Dispos	sal Facility Information
Name: Address: Phone:	IWM, Inc. 950 Ames Avenue Milpitas, CA 95035 (408) 942-8955	Name: Address; Phone:	Seaport Refining & Environmental 675 Seaport Blvd Redwood City, CA 94063 650-364-6158

IWM, INC. CERTIFIES THAT THE ABOVE LISTED NON-HAZARDOUS WASTE WILL BE TREATED AND DISPOSED AT THE DESIGNATED FACILITY IN ACCORDANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

William T. DeLon William 2. Cle For	
Authorized Representative (Print Name and Signature)	9/1/05 Date